these variations. As I have had occasion elsewhere to remark, this is a study where there can be no monopoly of knowledge on the part of any single observer. Many observers are necessary, and each may add something valuable to the general fund of information.

XXXII.—On the Birds of Fernando Po. By Boyd Alexander, F.Z.S., Rifle Brigade.

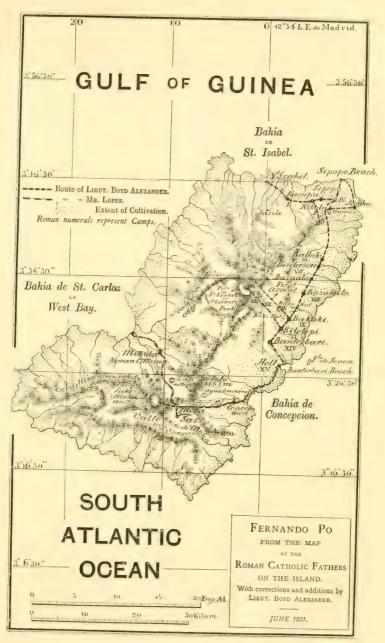
(Plates VIa.-IX.)

	(Page
Part	I. Introductory Remarks	. 330
22	II. List of the Species of which specimens were	
	obtained, with Field-Notes	340
٠ ,,	III. List of the Species recorded by previous Authors,	
	specimens of which were not obtained	399
22	IV. Ornithological Bibliography of Fernando Po	402

Part I.—Introductory Remarks.

Having completed in July last my ornithological survey of the Gold Coast and its hinterland, I determined to turn my attention to Fernando Po, the largest island of the Benin group. Although it had been previously explored by Louis Fraser, Naturalist to the Allen and Thomson Expedition to the Niger, in 1841, and by Mr. Newton, the Portuguese collector, in 1894, I had hopes of making further additions to the known fauna of the island. But the mountainous nature of Fernando Po, the lack of all roads in the interior, the form and nature of the Government, the great dearth of labour, and the evil reputation of the island for health constitute formidable difficulties to any scientific expedition.

It was, therefore, not without some misgiving that I left Liverpool in September last, in company with my Portuguese collector, Mr. Lopes, to explore this island; but I trusted to my two years' experience on the West Coast to pull me through. At Sierra Leone I had my first disappointment; I found it quite impossible to get carriers. No better success awaited me at Monrovia and at Cape Coast. At



Sekondi, a goodly hoard of Lagos natives, some 400 in number, who had been working on the Kumassi Railway, came on board. Here, I thought, was my opportunity, but not one of them would dream of coming. They had abundance of money and only thought of getting home. And, besides, the very name of Fernando Po was enough. The West-African native has a wholesome dread of this island, where in the past he has been badly treated, especially by the natives of Sierra Leone, who own a large number of the cocoa-farms there. At Old Calabar, however, where we stayed for five days, Sir Ralph Moor, the High Commissioner, very kindly came forward and supplied me with Government carriers.

A two days' run from Calabar brought us to Fernando Po, where, on the evening of Oct. 27th, 1902, we dropped anchor. Unlike the Canary Islands, with their volcanic aspects sprinkled with the green of short-lived grass, Fernando Po rises from the sea with lofty hills clothed to their summits with thick bush and virgin forest. Its northern portion is by far the more mountainous, culminating in a peak known as the Clarence Peak, or by the older name Pico Santa Isabel, which attains an altitude of 10,800 feet. In the southern portion the country is more open, with fertile valleys overgrown with long grass, while a series of mineral lakes and springs exist on the higher levels. The coast-line is flat and much indented with creeks and bays, which afford good landing-places for the numerous cocoa-farms on the island. The dotted portion on the accompanying map (Plate VIa.) shows the extent of cultivation, which consists of a belt about two miles in width round the island. Along the coast-line are numerous cocoa-farms, which are in the hands of English and Spanish traders. Coffee is also cultivated to a small extent, while plantains, bananas, manioc, and vams form the food of the natives. Further towards the interior, on the edge of the belt near the wooded hills, are small scattered villages of wooden huts belonging to the natives. Beyond this coast-belt there is thick forest intersected by tracks made by the native hunters. There are no roads—only small paths between the villages.

The only communication between the different farms on the island and Santa Isabel is by means of surf-boats, which are manned by West-African natives, chiefly from Sierra Leone and the Kru coast.

The approach to the island by the steamer is from the north, and as one drops anchor in the beautiful little bay of Santa Isabel the lofty peak confronts the traveller, towering above the harbour. In the distance to the left, its taller sister, the Cameroon Peak, also clothed with forest-growth, is visible even down to the white-walled houses of Victoria, which nestles at its base.

On Oct. 28th I landed at Santa Isabel, which presented a scene of much bustle and activity. It was the cocoa-season, and strings of carriers with bags upon their backs were journeying to and from the landing-stage. Throughout the day I was busy getting my baggage together and taking in stores for an early start up-country on the morrow. Trade-goods—such as beads, tobacco, rum, gunpowder, and clothes,—besides bags of rice for the carriers, had to be taken, and this greatly increased the work of transport. Much assistance was given to me by Mr. Couch, of the well-known trading-firm of Messrs. Holt. The Governor, the Marquis Montifuerte, also showed himself gracious and allowed all the baggage to pass free of custom-duties: this was a distinct advantage, since the duties are heavy.

At 5.30 a.m. on Oct. 29th our column of twenty-five men was on the move. This quick departure greatly surprised all the natives, who said "it must mean business." It was a fortunate thing that we arrived with carriers, as there was not a labourer to be had on the island—a curious state of things in a country so fertile and so full of possibilities. But the natives, known as Edeeyahs or Boobies, are excessively indolent, and nothing will induce them to work for any length of time. They are a feeble people and form a strange contrast to other West-African races. Of short stature, abdominous and spindle-shanked, and with broad furtive faces, they create anything but a favourable impression. Their dirt is undescribable; they seldom wash, but

scrape themselves with small knives, which are attached to their left upper arms for that purpose by a string band. Horrible deformities are also produced by hempen bands about six inches in width, which are fixed tight round the upper arms and below the knees. By way of adornment, they frequently plaster their bodies, faces, and hair with clay, dyed red with a leaf of a tree indigenous to the island. Patterns are often indulged in. It was quite a common thing to see tiny babies on their mothers' backs literally coated with this clay.

Heavy necklaces, bracelets, and anklets of beads deftly woven together in alternate bands of colour are worn—red, yellow, and blue being the most favoured colours. These ornaments sometimes consist of a very small pointed landshell. It is treated in the same way as the beads, and shews rank in the wearer. Before the introduction of trade-goods these shells were the current coin in the island, just as cowries were with the West-Coast natives. Little clothing is worn, except a loin-cloth of the scantiest description, in many cases replaced at the posterior by a tail of twisted cloth. A flat circular hat of woven grass, with a small pepper-pot crown, is worn, secured to the hair by a wooden skewer; this is often decorated with the skin of a small tree-squirrel and the blue pinion-feathers of a large Plantain-eater (Corythwola cristata).

Although it was now towards the end of the rainy season, the rains were still heavy. The native track along which we journeyed was slippery, and everything dripped with moisture. We were soon drenched through, and it was with difficulty that we could keep our guns dry. Our progress was slow, never more than two miles an hour, the carriers frequently slipping and stumbling, while in many places the path had to be cleared of undergrowth. At times it debouched into open glades, where birds mustered strongly, revelling in the bright sunlight, which scintillated on the delicate pinktinted leaves of the cocoa-plants, and, where the ground sloped down from the wooded hills to cultivated land, interspersed with palms and mighty cotton-trees, with their colossal branches in pale contrast to the blue background of

distant sea. About midday, after a tiring trek, we reached Basupu, a small Boobie-village, where we pitched our camp. While on the road we had collected a dozen specimens, the skinning and making up of which kept us busy for the rest of the afternoon. Our camp was prettily situated just above a stream, the noise of which we constantly heard. There is no lack of water on the island. We continually had to cross deep ravines, down which water, sparkling and clear, flowed from the hills.

At Ribola, our next camp, we met with some difficulty at the hands of the natives. After a tiring march through thick bush, we arrived towards sundown at this Boobie-village, which consisted of small oblong huts scattered among plantations of vam. These dwellings are made of wooden slabs driven unright into the ground and roofed with palm-leaves. The low doorways, through which the natives crawl, are closed by slabs in the same way as our pig-pounds. Our advent became the signal for a general helter-skelter of the owners into the long grass and bush. Mothers caught up their children as they ran, while the men stared at us and then tailed off to neighbouring huts, jabbering the whole way like a string of geese. The night was perfect. Palm-trees, with their tops silvered by the moon, reared their trunks from masses of tall fish-cane growing round our camp. Small mice crossed and recrossed the narrow paths without disturbing the silence, which now and again was broken by the rustling of grass-cane being pushed aside, and black faces would peer out the next moment to catch a glimpse of me as I sat enjoying my last pipe before bedtime. long afterwards an uproar of fowls being caught in neighbouring bushes made it clear to me that we were not going to be trusted. Early next morning (Nov. 1) we struck our eamp, and were glad to get away from this dirty village. The natives followed us for some distance, and, thinking they had seen the last of us, gradually melted away into the bush. I then doubled back and took a native track going almost due south into the wooded hills, where we stayed collecting for a couple of days; but the natives, gathering together under

their king and queen, objected to our going any further. It was, they said, their hunting or "beef" country, and no white man was fit to get to the big hill. They told my carriers many tales, for instance that a big river lived up in the mountain, and anyone who crossed it would die. All these stories were readily believed, and signs of intending desertion on the part of several carriers induced me to return the same way as I had come, our column being followed by a howling mob up to within a mile of Sipopo, where they again vanished. I subsequently learned that the natives of this district had been roughly handled by the Spanish troops, and this accounted for their unfriendly attitude towards the white man. The appearance of our big column aroused their suspicions, and, having no interpreter, we were quite unable to enlighten them as to the nature of our mission.

At Sipopo we occupied a cocoa-planter's house and stayed there making collections for several days. This gave a much-needed rest to our carriers. As soon as daylight came, about half-past five, my collector and I used to start off with a couple of carriers and follow one of the native paths into the bush. As a rule, we obtained during the morning's trek about 13 or 14 specimens, and with these we returned to camp, but were out again collecting in the evening. Our average take was between 18 and 20 birds a day. On one occasion, during a trek, we were suddenly startled by the sound of a stampede into the bush, just like the noise a flock of sheep make in getting through some obstacle, followed the next moment by a weird howl of voices like the whines of many dogs in unison. We again passed this spot on our return home. No one was visible, but our track was followed all the same. From time to time the loud report of guns came from behind. The Boobies, emboldened by our retreat, had followed us like an angry flock of geese, firing their guns at a respectful distance to frighten us. It would take too long here to record all our adventures with these curious people, so we must pass on to our camp at Bakaki, whence our first serious attempt to ascend the Peak was made. On the way I was fortunate enough to obtain the services of a

young Boobie-boy, named John, as guide and interpreter, from Mr. Barleycorn, of the Protestant Mission near Lakha.

The Bakaki country is inhabited by a race that speaks a different dialect, and is distinguishable by tribal marks on the face, and these people proved more friendly to us. It is a remarkable fact, but there are no less than five distinct tribal groups on the island. The Edeevah is a very stay-at-home creature. Many old men that we met with had never gone beyond their own villages all their lives. The mountainous and enclosed nature of the country, with its lack of communication, has no doubt been the cause of these tribal separations. As we passed each village our column gathered in strength, the principal men of the village preceding us as Each had a small hollow-necked gourd with a hole at the rounded end, and this was used as a flute; it can be heard at a great distance. Long before a village came in sight a musical dialogue used to be carried on, telling the inhabitants all about us and our coming. We toiled through the villages surrounded by natives, all eager to gain a sight of a white man, while some, less brave, eyed the column through the chinks in their huts. At Bakaki the natives again crowded round us; they watched, with open-eyed wonder, my tent being pitched, but what surprised and baffled them more than anything else was the opening and putting up of my camp-bed. They shewed themselves friendly enough, presenting us with fowls, for which they expected double their value in return; but when I asked for guides to take me up the big mountain, they became sullen and refused to help me. So long as we kept to the low ground they did not mind, but they did not want us to go into their "beef" country and build houses there. However, I determined to go without them, and with the help of my prismatic compass I struck the right direction. All our provisions and water had to be carried with us, and after a two days' climb and cutting our way through thick bush, I reached a height of nearly 8000 feet. Here was formed the nucleus of our collection, which included the majority of the new and rare species.

Hard work and the continual wearing of wet clothes soon began to tell upon us. My collector was the first to be threatened with fever, and I was reluctantly compelled to hurry down to Bakaki, where he fell ill. On my return, the Boobies could not disguise their satisfaction at the failure of my plans, and more palm-wine than ever was drank that Beyond the cultivation of their yams, these natives think of nothing else except to gather palm-wine-or "topi," as they call it—and palm-oil, which they exchange with the white traders for rum and tobacco. As regularly as clockwork the village is deserted towards the evening, and families troop down with calabashes to the palm-trees to gather the precious wine. To keep a Boobie away from his palm-wine for a single day is to make him a wretched man. After a halt of two days, my collector, although weak, was well enough to travel, and we accordingly pushed on to Bilelipi, where I determined to attempt the ascent of the mountain once more. By the large bribe of a keg of gunpowder, two hunters were at length induced to agree to guide us up to the top of the hill. Much talk ensued, and the other Boobie-folk did all they could to hinder these two men from going, saying that if they did so evil would befall them.

The Boobie is an excellent hunter. Armed with a long. dane-gun and cutlass, he seeks the wooded hills, cutting out his track as he goes. The game is plentiful and nothing comes amiss to him: tree-squirrels (Sciurinæ)-including the flying squirrel (Anomalurus fraseri) - small antelopes (of which there are at least two kinds, one, Cephalophus ogilbyi, a red species, and the other, C. melanorheus, a mousecoloured animal), and, the most prized of all, the treedassie (Dendrohyrax dorsalis) form his quarry. Living in the tops of the palms or in the leafy portions of forest trees, the last-named animal looks exceedingly comical, as it runs. in wild-pig fashion, along the broad branches from one thick retreat to another. The Boobies are quick to discover its home. Every likely tree is scanned and the least shaking of the leafy top seldom escapes their keen sight. While one stays below the tree with cutlass and dane-gun and a couple of

native dogs, the other rapidly scales the tree and shakes the dassic's home violently. The poor dassic falls with a great thud to the ground beneath and attempts to run, but the dogs keep it at bay and the next moment it is quickly dispatched with the cutlass. Our two hunters killed no less than thirteen of these animals in one morning on our way up the mountain.

On November 25th my second attempt to ascend the Peak was commenced. Six men preceded the column as pioneers to cut the road. Our loads had to be greatly reduced in weight, while ten carriers were told off to carry large rumjars full of water. A heavy mist hung round everything. It did not take long to become drenched with moisture as we brushed past and fought our way through the thick forestgrowth wringing with wet. Our progress was tedious. The Boobie-track, little frequented but by hunters, was much overgrown, and the axe had constantly to be used. In many places the path led through tunnels in impenetrable thickets, which it was hopeless to try to cut away, and we had to crawl through on our hands and feet, the loads being passed on from one carrier to another. From time to time heavy mists swept over us. The daylight was obscured, the dreary twilight of the forest became more dreary than ever, and all the birds were silent. After a climb of nearly seven hours we reached a small hunter's hut, at an altitude of about 3200 feet, which we made our base-camp. My carriers were thoroughly exhausted, and I found that a day's rest was necessary before continuing the ascent. This gave me an opportunity of making further collections. From this camp the ascent became so steep and rough that all loads of over 20 lbs. had to be discarded and our tents abandoned. Water, too, was no longer obtainable, and every drop had to be carried with us. At night our only shelter was a roughlymade roof of leaves. At a height of 6000 feet the kola-nut tree and the rubber-vine flourished, and the carriers, now short of rations, gathered the nuts with avidity. species of orchids and mountain-ferns grew in abundance on the sheltered slopes. As we ascended, the air became clearer.

Below hung a great carpet of mist, but now and again a breath of wind would swoop down and open it, disclosing to view valleys of exquisite beauty bathed in sunlight, where groups of giant tree-ferns flourished, and whence streams, looking like tiny threads of silver, wound their way to the distant sea.

On the morning of the fourth day, as the summit was reached, we experienced cold blasts of wind from the northwest. A coarse woody weed covered the ground, and the scattered trees were weather-beaten and wind-torn. Near the summit bird-life was scarce, but examples of several species were obtained, including Laniarius poensis, Urolais mariæ, and Lioptilus claudi. The whole ascent resulted in a collection of 45 specimens.

On December 1st we reached Banterbari Beach, where Messrs. Holt have a large cocoa-farm. Here I obtained, through the kindness of Messrs. Maysmor and Blissett, a couple of large surf-boats to take the whole expedition back to Port St. Isabel. A week later we all arrived safely, with boots and clothes looking much the worse for wear, and glad indeed we were to get back to civilization again.

My leave of absence from England having nearly expired, I started by the s.s. 'Oron' on her homeward voyage, leaving my collector behind, however, to work the southern portion of the island. Principal Father Coll and Padre Albanell, of the Roman Catholic Mission, gave him much assistance in his arduous work, and after a successful trip through the Moka Valley, he returned to England with an additional hundred skins. The work of the whole expedition resulted in a series of nearly 500 specimens representing three new genera and 103 species, of which 35 have proved to be new to science. I owe this remarkable success to having traversed the high ground, my predecessors having confined their attention to the lowlands. The wealth of bird-life on the island is indeed wonderful, and proportionately larger than in the forest-region of the adjoining West Coast. The new species are in many cases remarkable, some of them possessing very distinct characters, while others seem to have their nearest allies in East Africa. Owing to the close

proximity of Fernando Po to Cameroon, it is, however, to be expected that a number of these local forms will eventually be found in the latter when the highlands of that country have been thoroughly investigated.

In conclusion, it may be stated that the rich fauna of Fernando Po supports the theory that this island at one time formed part of the mainland. A large proportion of its birds are West African, while many species of its plants have been found to occur in the highlands of Abyssinia. The Peak of Fernando Po and the Cameroon Peak appear to rest on the same base, the narrow channel (30 miles wide) now separating them having a depth of only 290 feet, which suddenly falls on both sides to 600 fathoms.

The distribution of the species of birds recorded up to the present time as occurring in Fernando Po, relatively to the continent of Africa, may be stated as follows:—

Restricted to	Found also in	Found in	Found in
the Island.	West Africa.	East Africa.	Africa generally.
34	55	2	33

My best thanks are due to Dr. Bowdler Sharpe for his assistance in the identification of my birds.

Part II.—List of the Species of which specimens were obtained, with Field-Notes.

[The arrangement and nomenclature used are those of Shelley's 'Birds of Africa,' except where otherwise stated.]

1. CINNYRIS PREUSSI, Reichen.

Cinnyris preussi Shelley, B. Afr. i. no. 44 (1896), ii. p. 81 (1900).

I obtained a fine series of this Sun-bird, which is widely distributed over both the northern and southern portions of the island and inhabits the hill-ranges, where it is found in pairs. I procured specimens close to the Peak itself. It is essentially a highland bird, differing in this respect from *C. chloropygia*, the range of which is limited to the low cultivated portions of the island.

2. CINNYRIS CHLOROPYGIA (Jard.).

Nectarinia chloropygia Jard. Ann. & Mag. Nat. Hist. x. p. 188, pl. xiv. (1842: Fernando Po); id. Jard. & Selby, Illustr. Orn. (n. s.) pl. l. (1842); Jard. Monogr. Sun-birds, pp. 171, 249, pl. iii. (1843); Gray, Gen. B. i. p. 97 (1847); Allen & Thomson, Narr. Niger Exped. ii. p. 503 (1848: Fernando Po); Hartl. J. f. O. 1854, p. 12 (Fernando Po); Müll. J. f. O. 1855, p. 13 (Fernando Po); Hartl. Orn. W.-Afr. p. 47 (1857: Fernando Po).

Cinnyris chloropygia Bocage, Jorn. Lisb. (2) iv. p. 7 (Santa Isabel, Fernando Po); id. op. cit. (2) vii. p. 32 (1903: Fernando Po).

Cinnyris chloropygius Shelley, B. Afr. i. p. 4. no. 46 (1896), ii. p. 83 (1900); Salvad. Orn. Golfo d. Guinea, iii. p. 104.

a. Ad. 3. Ribola, Oct. 31, 1902.

b. Imm. Sipopo, Nov. 5, 1902.

c. Imm. Bakaki, Nov. 1902.

Common in the island.

3. Chalcomitra angolensis (Less.).

Nectarinia stangeri Allen & Thomson, Narr. Exped. Niger, ii. p. 501 (1848: Fernando Po); Hartl. J. f. O. 1854, p. 10 (Fernando Po); Müll. J. f. O. 1855, p. 15 (Fernando Po).

Nectarinia angolensis Hartl. Orn. W.-Afr. p. 45 (1857: Fernando Po).

Chalcomitra angolensis Shelley, B. Afr. i. no. 56 (1896), ii. p. 3 (1900); Bocage, Jorn. Lisb. (2) vii. p. 32 (1903: Fernando Po).

Cinnyris angolensis Salvad. Orn. Golfo d. Guinea, iii. p. 104.
a. Ad. ♂. Badasou, Nov. 12, 1902. Iris brown; legs and feet black.

b. Ad. ♀. Badasou, Nov. 11, 1902.

Upper parts brown, with a coppery gloss in certain lights; tail-feathers tipped with white and with a bronzy gloss; chin mottled with white; throat and fore-neck glossy brownish black; remainder of under parts creamy white, with brown centres to the feathers: iris brown; legs and feet black.

c. Imm. & (with black throat). Basakato, Nov. 12, 1902.

d. Imm.? ♂ (with metallic throat). Basakato, Nov. 12, 1902.

According to my note-book, this last specimen had the breeding-organs largely developed, and therefore could hardly be an immature bird. With the exception of the metallic coloration on the throat, fore-neek, and forehead, it is in the plumage of the adult female. The upper parts are much worn and bleached. This, I think, proves that the male assumes the female plumage at one season of the year (probably during the rains).

4. CYANOMITRA URSULÆ. (Plate IX. fig. 2.)

Cyanomitra ursulæ Alex. Bull. B. O. C. xiii. p. 38 (1903); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903).

Cinnyris ursulæ Salvad. Orn. Golfo d. Guinea, iii. p. 105.

Ad. 3. Forehead and fore part of crown faintly washed with metallic blue, with a greenish lustre in some lights; remainder of upper parts dull olive-yellow; quills and tailfeathers brown, edged on their outer webs with golden olive-yellow; ear-coverts and region behind eye cinereous; chin, throat, and breast pale smoky brown, becoming paler on the breast; remainder of under parts washed with pale olive-yellow; pectoral tufts orange-red; under wing-coverts and lining to quills white: bill black; iris hazel; legs and feet brown. Total length 3.6 inches, culmen 0.75, wing 1.95, tail 1, tarsus 0.75.

Near Bakaki, 4000 feet, Nov. 20, 1902.

We obtained two specimens, both males, of this rare little Sun-bird, which frequented the low bushes on the steep ascents of the mountain. It is a quiet bird and seems fond of solitude.

It is named after the author's niece, Miss Ursula Davis.

5. Cyanomitra obscura (Jard.).

Nectarinia obscura Jard. Monogr. Sun-birds, p. 253 (1843: Fernando Po); Jard. & Selby, Illustr. Orn. (n. s.) pl. li. (1843); Hartl. J. f. O. 1854, p. 11 (Fernando Po); Müll. J. f. O. 1855, p. 16 (Fernando Po); Hartl. Orn. W.-Afr. p. 50 (1857: Fernando Po).

Elaocerthia obscura Reichenb. Handb. Scansoriæ, p. 293, pl. lxxviii. figs. 3935-36 (1853: Fernando Po).

Adelinus obscurus Oust. N. Arch. Mus. (2) ii. p. 88 (1879 : Fernando Po).

Cinnyris obscura Gadow, Cat. B. Brit. M. ix. p. 77 (1884: Fernando Po); Bocage, Jorn. Lisb. (2) iv. p. 7 (1895: Fernando Po); id. op. cit. (2) vii. p. 32 (1903).

Cyanomitra obscura Shelley, B. Afr. i. no. 63 (1896), ii. p. 125 (1900).

Cinnyris obscurus Salvad. Orn. Golfo d. Guinea, iii. p. 104. Abundant on the low lands, where it feeds on the flowers of the paw-paw tree (Papaya carica). Breeds in November. We obtained a large series.

6. CYANOMITRA CYANOLÆMA (Jard.).

Nectarinia cyanolamus Jard. & Fraser, Contr. Orn. 1851, p. 154 (Clarence, Fernando Po); Hartl. Orn. W.-Afr. p. 51 (1857: Fernando Po); Gray, Hand-l. B. i. p. 108. no. 1318 (1869: Fernando Po).

Anthodiæta cyanolæma Reichenb. Handb. Scansoriæ, p. 294 (1853: Fernando Po).

Cyanomitra cyanolæma Shelley, B. Afr. i. no. 66 (1896), ii. p. 130 (1900); Bocage, Jorn. Lisb. (2) vii. p. 32 (1903: Fernando Po).

Cinnyris cyanolæmus Salvad. Orn. Golfo d. Guinea, iii. p. 105.

Ad. &. Basupu, Oct. 30, 1902. Rare.

This specimen has the bill slightly shorter than Fraser's type, which is said to have come from Fernando Po. The metallic parts are greener, with a blue rather than a lilac shade, and the general coloration of the upper parts more of a dusky than a chocolate-shaded brown.

7. Cyanomitra poensis Alex.

Cinnyris chloronatus Allen & Thoms. (nec Swains.) Narr. Exped. Niger, ii. p. 221 (1848: Fernando Po).

Nectarinia cyanocephala, part. Hartl. Orn. W.-Afr. p. 49 (1857).

Cinnyris oritis Bocage (nec Reichb.), Jorn. Lisb. (2) iv. p. 8 (1895: Pico Santa Isabel, Fernando Po).

Cyanomitra poensis Alexander, Bull. B. O. C. xiii. p. 38 (1903).

Cinnyris poensis Salvad. Orn. Golfo d. Guinea, iii. p. 105.

Adult male. Entire head, neck, and throat dark metallic greenish blue; remainder of upper parts greenish olive; quills and tail dusky brown, edged on their outer webs with more golden-olive feathers; entire breast and abdomen olive-yellow; pectoral tufts pale sulphur-yellow; axillaries yellow; under wing-coverts and lining to quills silky white: iris reddish brown; bill black; legs and feet greenish slate.

Total length 4.8 inches, culmen 1.1, wing 2.45, tail 1.65, tarsus 0.8. (*Type*. Bilelipi, 6000 feet, Nov. 27, 1902.)

Adult female. Similar to the male, but duller and smaller, and lacking the sulphur-yellow pectoral tufts.

Total length 4·3 inches, culmen 1, wing 2·2, tail 1·3, tarsus 0·64. (*Type*. Bakaki, 4000 feet, Nov. 20, 1902.)

Immature. Upper parts uniform dull greenish olive, with no metallic colours. Chin, throat, and fore-neck dusky brown; remainder of under parts olive-yellow.

We obtained a fine series of this species, which is widely distributed over the highlands.

Mr. Newton, the Portuguese collector, procured a male specimen during his expedition in 1895 in the vicinity of the Peak.

8. Anthothreptes fraseri Jard. & Selby.

Anthreptes fraseri Jard. & Selby, Illustr. Orn. (n. s.) pl. lii. (1843: Fernando Po); Hartl. J. f. O. 1854, p. 14 (Fernando Po); Shelley, Monogr. Nectar. p. 307, pl. xcix. (1879: Fernando Po).

Elæocerthia fraseri Reichen. Handb. Scansoriæ, p. 292, pl. 578. fig. 3934 (1853: Fernando Po).

Nectarinia fraseri, Müll. J. f. O. 1855, p. 16 (Fernando Po); Hartl. Orn. W.-Afr. p. 50 (1857; Fernando Po).

Arachnothera fraseri Gray, Hand-l. B. p. 113. no. 1399 (1869: Fernando Po).

Anthothreptes fraseri Gadow, Cat. B. Brit. M. ix. p. 113 (Fernando Po); Shelley, B. Afr. i. no. 73 (1896), ii. p. 141 (1900); Bocage, Jorn. Lisb. (2) vii. p. 33 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 106.

a. Imm. 3. Ribola, Oct. 31, 1902.

b. Nestling. Ribola, Oct. 31, 1902. Bill black; legs and feet flesh-coloured.

c. 1mm. d. Sipopo, Nov. 7, 1902.

d. Imm. 3. Sipopo, Nov. 4, 1902. Bill brown; legs and feet slaty flesh-coloured.

e. Ad. 9. Sipopo, Nov. 4, 1902.

f. Imm. J. Besoso. Nov. 13, 1992.

g. Ad. &. Ribola, Oct. 31, 1902. Iris brown; upper mandible pale brown, lower yellowish horn-coloured; legs and feet greenish olive.

h. Ad. &. Bakaki, Nov. 19, 1902.

i. Ad. 9. Bakaki, Nov. 20, 1902. Breeding.

j. Ad. d. Bilelipi, Nov. 25, 1902.

k. Ad. J. Basakato, Nov. 12, 1902.

The female is considerably smaller than the male.

Ad. 3. Bilelipi, Nov. 25, 1902. Total length 5.9 inches, culmen 0.85, wing 3, tail 2.55, tarsus 0.6.

Ad. 9. Bakaki, Nov. 20, 1902. Total length 4.6 inches, culmen 0.8, wing 2.45, tail 1.85, tarsus 0.52.

This species inhabits wooded places at the base of the hills, where it is locally distributed. It is a quiet bird, and always seems busy, examining with diligence the tops of thick-leaved bushes for insects.

The northern race of this species is A. idius Oberh., which ranges from Liberia to Gaboon (cf. Ibis, 1902, p. 288).

Although closely allied to A. fraseri, it can be distinguished by its smaller size and general darker and less yellowish-green coloration. An adult male (with pectoral tufts) obtained by me in Ashanti possesses these characteristics when compared with our Fernando Po specimens of A. fraseri.

A. fraseri.

Ad. 3. Bilelipi, Nov. 25, 1902. Total length 5.9 inches, culmen 0.85, wing 3, tail 2.55, tarsus 0.6.

A. idius.

Ad. 3. Prahsu, Gold Coast, Oct. 16, 1900. Total length 4·3 inches, culmen 0·7, wing 2·38, tail 1·7, tarsus 0·5.

9. Anthothreptes hypodila (Jard.).

Nectarinia collaris Jard. (nec Vieill.); Jard. Monogr. Suubirds, p. 251, pl. vi. (1843: Fernando Po).

Nectarinia hypodilus Jard. & Frascr, Contr. Orn. 1851, p. 153 (Clarence, Fernando Po); Hartl. J. f. O. 1854, p. 12 (Fernando Po); Müll. J. f. O. 1855, p. 52 (Fernando Po); Hartl. Orn. W.-Afr. p. 52 (1857: Fernando Po); Gray, Hand-l. B. i. p. 108. no. 1317 (1869: Fernando Po).

Anthodiæta subcollaris Reichenb. Handb. Scansoriæ, p. 293, pl. 590. figs. 4007, 4008 (1853: Fernando Po).

Anthodiæta hypodelos Reichenb. t. c. p. 293 (Clarence, Fernando Po).

Nectarinia subcollaris Hartl. Orn. W.-Afr. p. 52 (1857: Fernando Po).

Anthothreptes collaris Gadow, Cat. B. Brit. M. ix. p. 116, part. (1884: Fernando Po).

Cinnyris hypodila Bocage, Jorn. Lisb. (2) iv. p. 8 (1895: Fernando Po).

Anthothreptes hypodila Shelley, B. Afr. i. no. 78 (1896), ii. p. 151 (1900); Bocage, Jorn. Lisb. (2) vii. p. 33 (1903: Fernando Po).

Anthodiæta hypodila Salvad. Orn. Golfo d. Guinea, iii. p. 105.

a. Ad. & &. Basupu, Oct. 30, 1892. Bill, legs, and feet black.

b. Imm. ♂. Ribola, Nov. 2, 1902. Iris hazel. Breeding.
c. Imm. ♂. Sipopo, Nov. 5, 1902.

My immature males are similar to the adults, but the metallic golden green of the upper parts is less strong. Entire under parts yellow, becoming paler on the throat and sides of face. Bill brown.

Common, frequenting coffee- and cocoa-plantations.

10. Anthothreptes tephrolæma (Jard. & Fraser).

Nectarinia tephrolæmus Jard. & Fraser, Contr. Orn. 1851,

p. 154 (Clarence, Fernando Po); Hartl. J. f. O. 1854, p. 12 (Fernando Po); Müll. J. f. O. 1855, p. 16 (Fernando Po);
Hartl. Orn. W.-Afr. p. 51 (1857: Fernando Po); Gray,
Hand-l. B. i. p. 108. no. 1319 (1869: Fernando Po).

Anthodiæta tephrolæma Reichenb. Handb. Scansoriæ, p. 294 (1853: Fernando Po); Shelley, Monogr. Nectar. p. 333 (Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 106.

Anthothreptes tephrolema Shelley, B. Afr. i. no. 80 (1896), ii. p. 156 (1900); Bocage, Jorn. Lisb. (2) vii. p. 33 (1903: Fernando Po).

a. Imm. J. Basupu, Oct. 29, 1902.

b. Imm. d. Banterbari, Nov. 29, 1902.

Not common. Confined to the coast-line.

11. Zosterops stenocricota Reichen.

Zosterops stenocricota Reichen. J. f. O. 1892, p. 191; Shelley, B. Afr. i. no. 94 (1896), ii. p. 181 (1900).

a. Ad. ♂♀. Bakaki, Nov. 15, 1902. Iris hazel; bill black; legs and feet pale slaty.

b. Ad. 9. Bakaki, Nov. 18, 1902.

c. Ad. ♂ ♂ ♀. Bakaki, Nov. 20, 1902.

d. Ad. J. Bilelipi, Nov. 24, 1902.

e. Ad. d. Moka, Dec. 1, 1902.

f. Ad. ♀. Moka, Dec. 11, 1902.

I first met with this species in the neighbourhood of the mountain in flocks of five or six. When alighting on any tree they used to commence a noisy song-like chatter, not unlike that of a canary in tone. The native name is "Si tawi tawi," which is rather descriptive of the song.

Range. Fernando Po and Cameroon.

Examples of another species of *Zosterops*, described by Count Salvadovi as *Z. brunnea*, were obtained by Mr. Newton in 1895 on the Pico Santa Isabel at an altitude of 2500 metres. (See p. 399.)

12. LINURGUS OLIVACEUS (Fraser).

Coccothraustes olivaceus Fraser, P. Z. S. 1842, p. 144 (Clarence, Fernando Po); Allen & Thomson, Narr. Exped. Niger, ii. p. 500 (1848: Fernando Po); Fraser, Zool. Typ. pl. xlvii. (1849).

Ligurnus olivaceus Hartl. Orn. W.-Afr. p. 140 (1857: Fernando Po).

Crithagra olivacea Gray, Hand-l. B. iii. p. 101. no. 7505 (1870: Fernando Po).

Pyrrhospiza olivacea Sharpe, Cat. B. Brit. Mus. xii. p. 434 (1888: Fernando Po); Bocage, Jorn. Lisb. (2) vii. p. 37 (1893: Fernando Po).

Linurgus olivaceus Shelley, B. Afr. i. p. 304 (1896); Salvad. Orn. Golfo d. Guinea, iii. p. 112.

Pyrrhospiza camerunensis Alexander, Bull. B. O. C. xiii. p. 38 (1903: Mt. Victoria).

- a. No. 7. Ad. &. Basupu, Oct. 29, 1902. Bill orange-yellow; iris hazel; legs and feet orange-yellow.
 - b. No. 88. Ad. &. Ribola, Nov. 2, 1902.
- c. No. 89. Imm. J. Ribola, Nov. 2, 1902. This specimen is changing from the female plumage into that of the adult male.
 - d. No. 90. Ad. ♀. Ribola, Nov. 2, 1902.
 - e. No. 202. Ad. J. Bakaki, Nov. 14, 1902.
- f. No. 208. Ad. d. Bakaki, Nov. 14, 1902. Total length 5.5 inches, culmen 0.6, wing 3, tail 2.4, tarsus 0.7.
- g. No. 317. Ad. ♀. Bakaki, Nov. 22, 1902. Total length 5·3 inches, culmen 0·51, wing 2·7, tail 2, tarsus 0·62. Bill orange-yellow; legs and feet orange-yellow.
 - h. No. 28. Ad. &. Moka, Dec. 9, 1902.
 - i. No. 34. Ad. J. Pico Joaquin, Dec. 10, 1902.
 - j. No. 43. Ad. d. Pico Joaquin, Dec. 11, 1902.
 - k. No. 46. Ad. d. Pico Joaquin, Dec. 10, 1902.
 - l. No. 69. Ad. J. Moka Lake, Dec. 13, 1902.

Since I gave P. camerunensis specific rank, further material has come to hand and I find that the characters of the supposed new species are not constant. This Weaver-bird is locally distributed on the high lands of the island. In favoured localities it is fairly numerous, going about in small flocks. It breeds in November.

13. VIDUA SERINA (Linn.).

Vidua principalis Shelley, B. Afr. i. no. 312 (1896).

a. Ad. &; imm. &. Moka, Dec. 9, 1902.

b. Ad. ♂; young; imm. ♂. Dec. 14, 1902.

Confined to the southern portion of the island. The adult males were in full breeding-plumage. This species had not been previously obtained in Fernando Po.

14. NIGRITA CANICAPILLA (Strickl.).

Æthiops canicapillus Strickl. P. Z. S. 1841, p. 30 (Fernando Po: type, Brit. Mus.).

Nigrita canicapilla Fraser, P. Z. S. 1842, p. 145 (Fernando Po); id. Zool. Typ. pl. xlviii. (1849); Bp. Consp. Av. i. p. 444 (1850: Fernando Po); Hartl. Orn. W.-Afr. p. 130 (1857: Fernando Po); Bocage, Jorn. Lisb. (2) iv. p. 9 (1895: Fernando Po); Shelley, B. Afr. i. no. 365 (1896); Bocage, Jorn. Lisb. (2) vii. p. 36 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 112.

- a. Ad. 33. Ribola, Nov. 1, 1902. Total length (measured in flesh) 5.45 inches, culmen 0.59, wing 2.9, tail 2.3, tarsus 0.7. Iris lemon-yellow; bill black; legs and feet brown.
 - b. Ad. ♀. Basakato, Nov. 12, 1902.
- c. Ad. d. Bakaki, Nov. 13, 1902. Iris red; legs and feet brown.
 - d. Ad. J. Bakaki, Nov. 15, 1902. Breeding.
- e. Ad. ♀. Bakaki, Nov. 19, 1902. Total length (measured in flesh) 5·3 inches, culmen 0·55, wing 2·7, tail 2·1, tarsus 0·7. Iris orange-yellow; legs and feet brown.

In the female the black of the under parts has a more brownish shade, and the extent of white on the rump is less pronounced.

- f. Ad. d. Banterbari, Nov. 29, 1902.
- g. Ad. J. Pico Joaquin, Dec. 10, 1902.
- h. Ad. ♀. Moka, Dec. 15, 1902.

This species is widely distributed on the high ground, frequenting thick trees in pairs. In flight the white on the rump is very conspicuous.

15. Nigrita luteifrons J. & E. Verr.

Nigrita luteifrons Verr. Rev. et Mag. de Zool. 1851, p. 420; Bocage, Jorn. Lisb. (2) iv. p. 9 (1895: Fernando Po); Shelley, B. Afr. i. no. 368 (1896); Bocage, Jorn. Lisb. (2) vii. p. 36 (1903).

Nigrita lucieni Sharpe & Bouvier, Bull. Soc. Zool. France, iii. p. 75 (1878); Shelley, B. Afr. i. no. 369 (1896); Salvad. Orn. Golfo d. Guinea, iii. p. 112.

- a. Ad. ♂♀. Ribola, Oct. 31, 1902.
- b. Ad. ♀. Ribola, Nov. 2, 1902.
- c. Imm. ♀. Badasou, Nov. 11, 1902.
- d. Ad. d. Besoso, Nov. 13, 1902.
- e. Ad. & d. Bakaki, Nov. 14, 1902.
- Ad. 3. Ribola, Oct. 31, 1902. Total length (measured in flesh) 4.4 inches, culmen 0.45, wing 2.4, tail 1.8, tarsus 0.55. Iris black; bill black; legs and feet flesh-coloured.
- Ad. Q. Ribola, Oct. 31, 1902. Total length (measured in flesh) 4·3 inches, culmen 0·4, wing 2·3, tail 1·69, tarsus 0.5. Coloration of soft parts as in male. Breeding.

Locally distributed, and fond of frequenting the tops of tall palm-trees, where it nests. We often observed it in sunny spots hawking in the air for flies.

It is very interesting to have come across both a male and a female of this species, as the latter sex was previously considered to belong to another species—Nigrita lucieni.

Range. Fernando Po, Cameroon, Gaboon, and the Congo.

16. NIGRITA FUSCONOTA Fraser.

Nigrita fusconotus Fraser, P. Z. S. 1842, p. 145 (Clarence, Fernando Po: type, Brit. Mus.); Allen & Thomson, Narr. Exped. Niger, ii. p. 501 (1848: Fernando Po); Fraser, Zool. Typ. pl. xlix. (1849).

Nigrita fusconota Hartl. Orn. W.-Afr. p. 130 (1857: Fernando Po); Shelley, B. Afr. i. no. 371 (1896); Bocage, Jorn. Lisb. (2) vii. p. 36 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 112.

Nigrita pinaronota Sharpe, Cat. B. Brit. Mus. xiii. p. 318 (1890: Fernando Po).

a. Ad. ♂♀. Ribola, Nov. 2, 1902.

b. Ad. J. Ribola, Nov. 2, 1902. Breeding.

Ad. &. Total length (measured in flesh) 4.2 inches, culmen 0.5, wing 2.1, tail 1.9, tarsus 0.56. Bill black; iris black; legs and feet slaty grey.

Ad. \circ . Total length (measured in flesh) 3.81 inches, culmen 0.4, wing 2, tail 1.6, tarsus 0.51.

Rare. Found on high ground, frequenting the topmost branches of tall trees in sunny clearings.

The type of this species was obtained by Fraser in Fernando Po.

17. CRYPTOSPIZA REICHENOWI (Hartl.).

Cryptospiza reichenowi Sharpe, Cat. B. Brit. Mus. xiii. p. 234 (1890); Shelley, B. Afr. i. no. 378 (1896).

Cryptospiza ocularis Sharpe, Bull. B. O. C. xiii. p. 8 (1902: Mt. Ruwenzori).

Cryptospiza elizæ Alexander, Bull. B. O. C. xiii. p. 38 (1903); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 112.

Since my description of *C. elizæ* was published, Professor Reichenow has kindly forwarded to the British Museum the type—a female—of *C. reichenowi* from Cameroon. After comparing it carefully with *C. elizæ* and with the type of *C. ocularis* from Mount Elgon, East Africa, I have no hesitation in making both these species synonymous with *C. reichenowi*.

In the 'Journal für Ornithologie,' 1875 (pl. ii. fig. 1), C. reichenowi is figured; but the plate is misleading, since it represents the coloration of the hind-neck and under surface as bright olive-brown instead of yellowish olive-brown.

Our two immature males are similar to the adult, but lack the red round the eyes and on the lores, the latter being buffish brown, while the carmine-red on the back, rump, and upper tail-coverts is less pronounced. Legs and feet whitish brown. (Bakaki, November 14, 1902.)

Ad. &. Near Bakaki, 4000 ft., Nov. 20, 1902. Length 4·3 inches, culmen 0·5, wing 2·2, tail 1·45, tarsus 0·75. Iris black; bill slaty black; legs and feet brown.

The sexes are alike in plumage and measurements.

A local species and only met with in the locality of Bakaki. We observed it in small flocks frequenting the more open spots overgrown with long grass. The parties consisted chiefly of young birds.

18. Nesocharis shelleyi.

Nesocharis shelleyi Alexander, Bull. B. O. C. xiii. p. 48 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 112.

This new genus belongs to the same group as Spermestes and Cryptospiza, but differs in having a much weaker and more compressed bill; culmen slightly curved. Tail entirely black, very short and rounded, and not extending beyond the outstretched feet. Wing rounded; 3rd, 4th, and 5th primaries longest, 2nd equal to the 7th; 1st very small, narrow, and sharply pointed. Upper tail-coverts olive-yellow like the back; neck and entire breast grey.

The adult bird may be described as follows:—Entire head and upper half of the throat jet-black; neck, breast, and remainder of under parts French grey; remainder of upper parts yellowish olive, becoming brighter on the rump and upper tail-coverts; wing-coverts like the back; quills and secondaries blackish brown, edged with yellowish olive; tail-feathers black; under wing-coverts and inner edges of quills white: bill bluish slate-colour; legs and feet brownish. Length 3·1 inches, culmen 0·32, wing 1·7, tail 1·2, tarsus 0·5. (Type. Moka, December 12, 1902.)

This species was not found in the northern part of the island, but was discovered by my collector on the Moka highlands. It appears to be rare, since only two specimens were observed and obtained, which were frequenting the tops of tall thick-leaved trees.

The species has been named after Capt. G. E. Shelley.

19. Spermestes poensis (Fraser).

Amadina poensis Fraser, P. Z. S. 1842, p. 145 (Clarence, Fernando Po); Allen & Thomson, Narr. Exped. Niger, ii. p. 500 (1848; Fernando Po); Fraser, Zool, Typ. pl. l. fig. 1 (1849).

Spermestes poensis Bp. Consp. Av. i. p. 454 (1850:

Fernando Po); Hartl. Orn. W.-Afr. p. 148 (1857: Fernando Po); Bocage, Jorn. Lisb. (2) iv. p. 10 (1895: Fernando Po); Shelley, B. Afr. i. no. 386 (1896); Bocage, Jorn. Lisb. (2) vii. p. 36 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 113.

a. Ad. ♀. Ribola, Oct. 31, 1902. Iris brown; bill pale bluish slate-coloured; legs and feet slate-coloured.

b. Ad. ♀. Sipopo, Nov. 3, 1902.

Found in small flocks frequenting waste places near villages.

20. Estrilda occidentalis Jard. & Fraser.

Estrelda occidentalis Jard. & Fraser, Contr. Orn. 1851, p. 156 (Fernando Po); Hartl. Orn. W.-Afr. p. 140 (1857: Fernando Po).

Habropyga minor Cab. J. f. O. 1878, p. 229.

Estrilda rubriventris Bocage (nec Vieill.), Jorn. Lisb. (2) vii. p. 36 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 113.

Imm. J. Moka, Dec. 12, 1902.

Ad. & &. Moka, Dec. 16, 1902.

I am unable to find any constant characters to separate *E. minor* from the present species. Specimens of *E. minor* from Abyssinia and Nyassaland in the British Museum are somewhat darker on the upper parts and lighter on the throat; but these characters do not remain constant, and intermediate forms occur. Specimens of *E. minor* in my Zambesi collection are identical with the Fernando Po birds.

Young male (Moka, Dec. 12, 1902). Crown dark brown; remainder of upper parts rufous brown, especially on the rump; quills and tail-feathers dusky brown, edged with rufous brown; under parts tawny buff suffused with pink, becoming whitish on the throat and sides of face; feathers round eye dull crimson; bill black.

Range. Fernando Po, Cameroon, and Abyssinia, southward to Benguela and the Zambesi.

In Gaboon and Loango this form is replaced by a local subspecies, E. rubriventris,

21. Estrilda elizæ.

Estrilda elizæ Alexander, Bull. B. O. C. xiii. p. 54 (1903).

Adult. Similar to E. nonnula Hartl., but differs in having the entire under parts tinted with grey and the under tail-coverts pale lead-grey. Wings pale. Iris brown; bill black, with a patch of red on each side of the culmen and at the base of the lower mandible; legs and feet blackish. The sexes are alike in plumage and measurements. Total length 3.8 inches, culmen 0.4, wing 1.9, tail 1.7, tarsus 0.65. (Type, ad. 3. Moka, December 14, 1902.)

Immature. Hind-neck and mantle uniform greyish brown; entire breast and under tail-coverts washed with pale brown: bill black; legs and feet blackish.

This *Estrilda* is confined to the southern portion of the island. My collector obtained his specimens from the long grass in the Moka valley.

The species is named after Lady Eliza Alexander.

22. Malimbus Rubricollis (Swains.).

Euplectes rufovelatus Fraser, P. Z. S. 1842, p. 142 (Clarence, Fernando Po: type, Brit. Mus.); id. Ann. & Mag. Nat. Hist. xii. p. 131 (1843); Allen & Thomson, Narr. Exped. Niger, ii. p. 500 (1848: Fernando Po); Fraser, Zool. Typ. pl. xlvi. (1849).

Sycobius malimbus Hartl, Orn. W.-Afr. p. 133 (1857: Fernando Po).

Malimbus rubricollis Sharpe, Cat. B. Brit. Mus. xiii. p. 478 (1890: Fernando Po); Bocage, Jorn. Lisb. (2) iv. p. 10 (1895: Santa Isabel, Fernando Po); id. op. cit. vii. p. 37 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 114.

Malimbus malimbus Shelley, B. Afr. i. no. 479 (1896).

- a. Imm. ?. Basupu, Oct. 31, 1902. Iris brown; bill blackish horn-coloured; legs and feet dark lead-coloured.
- b. Ad. さるよう ♀ ♀. Ribola, Oct. 31, 1902. Iris claretred; legs and feet brown; bill black.
 - c. Ad. 3. Basakato, Nov. 12, 1902.

Common at the foot of the hill-ranges, resorting to the thick forest-trees.

23. MELANOPTERYX MAXWELLI.

Melanopteryx nigerrima Bocage (nec Vieill.), Jorn. Lisb. (2) iv. p. 10 (1895: Fernando Po); id. op. cit. vii. p. 37 (1903); Salvad, Orn. Golfo d. Guinea, iii. p. 114.

Melanopteryx maxwelli Alexander, Bull. B. O. C. xiii. p. 54 (1903).

Adult. Similar to M. albinucha, but with the base of the feathers grey instead of white. Upper parts, throat, and breast jet-black, not brownish black; legs and feet brownish black; iris lemon-coloured; bill black. (Type, ad. 3. Ribola, Oct. 31, 1902.)

Total length 5.6 inches, culmen 0.7, wing 3, tail 2, tarsus 0.75.

The sexes are alike in plumage and measurements.

Immature male. General colour above sooty-brown, with traces of yellowish-olive edges to the feathers of the hind-neck and crown, the latter mottled with black; sides of head and under parts pale yellowish olive, inclining to whitish on the under tail-coverts; thighs light brown: bill horn-brown; legs and feet dark brown.

Immature female. Similar to immature male, but with no yellowish edges to the feathers of the hind-neek and crown; sides of neck and under parts ashy white, inclining to pale tawny on the abdomen and under tail-coverts; outer edges of secondaries and quills ashy white: iris pale green; legs and feet light brown.

This species is a good intermediate form between *M. nigerrima* and *M. albinucha*. It differs from the former in being smaller, in the jet-black of the upper parts, throat, and breast, and in the brownish-black legs and feet.

We found this Weaver-bird on the lowlands frequenting the woods, where it nests in small colonies, the tops of thick-leaved forest-trees being chosen as nesting-sites. The note is a running chatter. The following specimens were obtained:—

a. Ad. J. Basupu, Oct. 29, 1902.

b. Ad. 9. Type. Ribola, Oct. 31, 1902.

c. Ad. J. Type. Ribola, Oct. 31, 1902.

d. Ad. ♀. Ribola, Oct. 31, 1902.

e. Ad. 3. Sipopo, Nov. 6, 1902.

f. Imm. ♂♂♀. Sipopo, Nov. 6, 1902.

Named after the Right Hon. Sir Herbert Maxwell, Bart., M.P., F.R.S.

24. Sycobrotus tephronotus (Reichen.).

Symplectes tephronotus Reichen. J. f. O. 1892, p. 219 (Buea, Cameroon).

Sycobrotus tephronotus Shelley, B. Afr. i. no. 506 (1896). Sycobrotus poensis Alexander, Bull. B. O. C. xiii. p. 38 (1903); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 114.

Ad. 3 3 3. Bakaki, 4000 ft., Nov. 15, 1902.

We found this species only in one locality near Bakaki at an altitude of 4000 feet, frequenting the thick forest-trees. It appeared to be very local and was generally observed in small parties. The note may be described as a running voluble "tizz."

Ad. J. Bakaki, Nov. 15, 1902.

Total length (in flesh) 6 inches, culmen 0.8, wing 3.3, tail 2.2, tarsus 1.0.

Range. Fernando Po and Cameroon.

25. HETERHYPHANTES MELANOGASTER (Shelley).

Heterhyphantes melanogaster Shelley, B. Afr. i. no. 512 (1896); Alexander, Bull. B. O. C. xiii. p. 49 (1903: Fernando Po); Salvad. Orn. Golfo di Guinea, iii. p. 113.

Heterhyphantes melanolæma Salvad. part., Orn. Golfo d. Guinea, iii. p. 113.

Ad. 3, ad. \$\pi\$, Dec. 7, 1902; ad. 3, Dec. 16, 1902. Moka.

Adult male. Differs from the female in having an orange-yellow crown and nape; sides of face and prepectoral collar orange-yellow; chin and throat black.

Total length 5.5 inches, culmen 0.8, wing 2.7, tarsus 0.85. This rare Weaver-bird was discovered by Sir Harry Johnston in Cameroon at an altitude of 8000 feet. The

type, a female, was figured and described by Capt. Shelley (P. Z. S. 1887, p. 126, pl. xiv. fig. 2).

Range. South-east Fernando Po and Cameroon.

26. Hyphanturgus brachypterus (Swains.).

Ploceus brachypterus Swains. B. W. Afr. i. p. 168, pl. x. (1837); Fraser, P. Z. S. 1843, p. 52 (Fernando Po).

Hyphantornis brachyptera Hartl, Orn. W.-Afr. p. 122 (1857: Fernando Po).

Sitagra brachyptera Bocage, Jorn. Lisb. (2) vii. p. 36 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 114.

Hyphanturgus brachypterus Shelley, B. Afr. i. no. 521 (1896).

- a. Ad. 3. Bakaki, Nov. 10, 1902. Iris pale lemon-coloured; legs and feet slaty flesh-coloured.
 - b. Ad. ♀. Bakaki, Nov. 13, 1902.
 - c. Ad. ♀. Moka, Dec. 14, 1902.
 - 27. Hyphantornis cucullatus (P. L. S. Müll.).

Ploceus textor (Gm.); Fraser, P. Z. S. 1843, p. 51 (Fernando Po).

Hyphantornis textor Hartl. Orn. W.-Afr. p. 124 (1857: Fernando Po).

Hyphantornis cucullatus Bocage, Jorn. Lisb. (2) vii. p. 37 (1903: Fernando Po); Shelley, B. Afr. i. no. 562 (1896); Salvad. Orn. Golfo d. Guinea, iii. p. 114.

Hyphantornis collaris Boc. (nec Vieill.), Jorn. Lisb. (2) iv. p. 10 (1895).

Ad. ♂ ♀. Sipopo, Nov. 6, 1902.

Very common. Nesting in all the palm-trees round the native huts. Breeds in November.

28. Lamprocolius Chubbi.

Lamprocolius chubbi Alexander, Bull. B. O. C. xiii. p. 48 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 115.

Adult female. Upper parts glossy steel-blue with goldengreen shades, most distinct on the hind-neck, upper back, rump, and wing-coverts; the blue shade of the hinder crown being rather sharply defined from the golden green of the neck: median and greater wing-coverts with subterminal velvetyblack patches almost confined to their outer webs; quills black, with outer webs and ends golden green; secondaries of a bluer shade towards their centre and with a broad black velvet band in certain lights; tail-feathers velvety bluish black, with their ends greenish steel-blue and with obsolete narrow blue bars. Sides of forehead velvety black; sides of head frizzled greenish steel-blue, behind which is a patch of coppery bronze; chin and throat violet-tinted steel-blue; remainder of under parts bluish golden green, becoming golden green on the abdomen and under tail-coverts; under surface of wing black, with the coverts metallic steel-blue.

Total length 11.5 inches, culmen 1.1, wing 6, tail 4.7, tarsus 1.2.

Type. Moka, Dec. 16, 1902.

Rare, and only met with in the southern portion of the island.

This species is allied to *L. splendidus*, but differs chiefly in having no trace of reddish purple on the under parts.

Named after Mr. Charles Chubb, of the South Kensington Museum.

29. Amydrus elgonensis.

Amydrus elgonensis Sharpe, Ibis, 1891, p. 242 (Mt. Elgon, East Africa).

a. Ad. ♀. Moka, Dec. 8, 1902.

b. Ad. &. Moka, Dec. 9, 1902.

c. Imm. d. Pico Joaquin, Dec. 10, 1902.

d. Ad. J. Pico Joaquin, Dec. 11, 1902.

e. Ad. ♀. Pico Joaquin, Dec. 11, 1902.

f. Imm. J. Pico Joaquin, Dec. 11, 1902.

g. Ad. &. Moka, Dec. 14, 1902.

Confined to the southern portion of the island.

Our birds agree with the type of A. elgonensis (from Mount Elgon) in the British Museum.

I think that Dr. Sharpe was wrong in reuniting this species to A. walleri Shelley, from which it differs in being smaller and in having a more slender bill and a metallic-purple shade on the throat and sides of neck and wing-coverts, instead of a metallic green.

30. Corvus scapulatus Daud.

Corvus leuconotus Allen & Thoms. Narr. Exped. Niger, ii. p. 221 (Fernando Po).

Corvus curvirostris Gould; Hartl. Orn. W.-Afr. p. 114 (1857: Fernando Po).

Corvus scapulatus Bocage, Jorn. Lisb. (2) iv. p. 9 (1895: Fernando Po); Shelley, B. Afr. i. no. 634 (1896); Salvad. Orn. Golfo d. Guinea, iii. p. 116.

Common along the coast.

31. DICRURUS AFER (Licht.).

Corvus afer Licht. Cat. Rev. Nat. Hamb. p. 10 (1793). Dicrurus afer Shelley, B. Afr. i. no. 646 (1896).

Dicrurus coracinus Reichen.; Shelley, Ibis, 1901, p. 590. Ad. ♂; ad. ♀. Banterbari, Nov. 29, 1902. Iris pinkish red.

These two specimens are in fine glossy plumage and are identical with others obtained by me in Ashanti. In my paper on the Gold Coast birds (Ibis, 1902, p. 278) I separated the Hinterland specimens from those of the forest-region as D. coracinus on account of the duller coloration of the upper parts and of the almost whitish-brown inner webs of the primaries; but I have since collected further specimens in the Hinterland during the month of August, when the birds were in fresh plumage, and find that they are practically identical with the Ashanti specimens (D. afer).

The more open country, and the consequently greater power of the sun, would soon bleach the glossy plumage of these Drongos; thereby accounting for their generally duller appearance. The gloss on the plumage is undoubtedly affected by the season and the atmosphere. In the forest-region, where the rainfall is greater and the sunlight more subdued, a fresher and more glossy plumage is always to be noticed.

In Fernando Po Dicrurus afer is by no means common. We observed it at an altitude of 4000 feet in the thick forest and at the top of the high cotton-trees among the cocoaplantations near the coast. From these points of vantage the birds continually uttered their peculiar chattering songs,

which were varied now and again by a series of metallic screeches.

32. GRAUCALUS PREUSSI Reichen.

Graucalus preussi Shelley, B. Afr. i. no. 682 (1896); Sharpe, Hand-l. B. iii. p. 291 (1901).

Ad. 9. Mt. St. Isabel, November 17, 1902.

Total length (measured in flesh) 8.7 inches, culmen 0.9, wing 4.53, tail 4.3, tarsus 0.96. Iris black; legs and feet brownish black.

Obtained at a height of 5000 feet.

33. Laniarius poensis (Alex.).

Dryoscopus poensis Alexander, Bull. B. O. C. xiii. p. 37 (1903); Bocage, Jorn. Lish. (2) vii. p. 40 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 103.

Adult. Entire plumage glossy steel-black, with little or no gloss on the abdomen and thighs; iris bluish black. The female is smaller and somewhat less glossy, especially on the under parts.

Ad. 3. Total length 6.9 inches, culmen 0.85, wing 3.0, tail 2.65, tarsus 1.15. (*Type*. Mt. St. Isabel, Nov. 26, 1902.)

Ad. \(\varphi\). Total length 6.4 inches, culmen 0.8, wing 2.9, tail 2.6, tarsus 1.1. (Type. Mt. St. Isabel, Nov. 26, 1902.)

The nearest ally is Laniarius nigerrimus Reichen, from East Africa.

We found this Shrike locally distributed in the vicinity of the Peak, from a height of 4000 feet upwards. My collector also obtained it at Moka. It is a shy bird, resorting to the tops of the tall mountain trees or to the thickest brushwood, where it is more often heard than seen, uttering peculiar ventriloquial croaks in a constantly varied tone.

We collected the following specimens:-

a. Ad. &. Near Bakaki, 4000 ft., Nov. 17, 1902.

b. Ad. & &. Near Bakaki, 4000 ft., Nov. 20, 1902.

c. Ad. d. Type. Mt. St. Isabel, Nov. 25, 1902.

d. Ad. 2. Type. Mt. St. Isabel, Nov. 26, 1902.

e. Ad. d. Moka, Dec. 9, 1902.

f. Ad. J. Moka, Dec. 15, 1902.

34. Eurillas latirostris (Strickl.).

Andropadus latirostris Strickl. P. Z. S. 1844, p. 100 (Fernando Po); id. Ann. & Mag. Nat. Hist. xv. p. 127 (1845); Allen & Thomson, Narr. Exped. Niger, ii. p. 496 (1848: Fernando Po); Fraser, Zool. Typ. pl. 35 (1849); Hartl. Orn. W.-Afr. p. 87 (1857: Fernando Po); Shelley, B. Afr. i. no. 836 (1896); Bocage, Jorn. Lisb. (2) vii. p. 35 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 111.

Eurillas latirostris Sharpe, Hand-l. B. iii. p. 325 (1901).

We obtained a fine series of this Bulbul, which is widely distributed both on the high and low ground. Two of our specimens marked "immature" have scarcely any trace of the yellow moustache, and the lower mandible is of a yellowish horn-colour.

In this plumage they come very close to *E. virens*, but the olive-blackish stripe on the sides of the chin is always indicated and serves at all times to distinguish this species from its congener.

The note of this bird is a clear "wheet-wheet," uttered constantly from the tops of tall trees, and becoming very persistent in the early morning and evening.

Adult male. Ribola, Nov. 1, 1902. Iris brown; bill blackish brown; legs and feet yellowish flesh-coloured.

Immature male. Upper mandible blackish brown, base of lower yellowish horn-coloured; legs and feet yellowish flesh-coloured.

35. Eurillas virens (Cass.).

Andropadus virens Bocage, Jorn. Lisb. (2) iv. p. 8 (1895: Fernando Po); Shelley, B. Afr. i. no. 840 (1896); Bocage, Jorn. Lisb. (2) vii. p. 35 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 111.

Eurillus virens Sharpe, Hand-l. B. iii. p. 324 (1901).

We obtained a large series of this species, which is widely distributed over the lower portions of the island.

Our three adult birds differ from the immature specimens in having the wing-coverts and quills washed with yellowish olive instead of reddish brown; back olive-brown, the crown a little darker; axillaries and under wing-coverts sulphur-yellow: bill brown; legs and feet greenish olivebrown; iris claret-red in male, hazel in female.

In all our immature birds the bills are paler and the legs and feet of a yellowish flesh-colour.

This Bulbul was very common, meeting us at every turn. In the morning and evening the undergrowth and fish-canes used to resound with its loud hurriedly-rendered notes, some of which were not unpleasant, closely resembling those of a Calamocichia.

36. Macrosphenus poensis.

Macrosphenus poensis Alexander, Bull. B. O. C. xiii. p. 36 (1903); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 110.

Adult male. Similar to M. flavicans Cass., but head and neck dark cinercous with no greenish tinge. Under parts below neck greenish olive-yellow; quills brownish black edged externally with pale cinercous; thighs pale cinercous: bill black, underneath whitish horn-coloured; legs and feet slate-coloured; iris lemon-yellow. Total length 5.2 inches, culmen 0.72, wing 2.3, tail 2, tarsus 0.85.

Only one specimen obtained, near Bilelipi, 4000 feet, Nov. 25, 1902.

37. Bleda notata (Cass.).

Xenocichla notata Shelley, B. Afr. i. no. 851 (1896).

Bleda notata Sharpe, Hand-l. B. iii. p. 323 (1901).

a. Imm. J. Ribola, Nov. 2, 1902.

This specimen has the primary-coverts and broad tips to the secondaries rusty reddish brown.

b. Ad. ♀. Sipopo, Nov. 4, 1902.

Bill blackish brown; iris brown; legs and feet of a whitish flesh-colour.

c. Ad. ♀. Sipopo, Nov. 7, 1902.

38. Bleda serina (J. & E. Verr.).

Pyrrhurus serinus Shelley, B. Afr. i. no. 894 (1896).

Bleda serina Sharpe, Hand-l. B. iii. p. 322 (1901).

a. Ad. & d. Basupu, Oct. 30, 1902. Iris hazel; bill

reddish horn-coloured, brownish at tip; legs and feet of a dirty claret-colour.

Not common. Frequents the tops of the tall trees.

39. Bleda tephrolæma (Gray).

Criniger tephrolamus Shelley, B. Afr. i. no. 877 (1896).

Bleda tephrolæma Sharpe, Hand-l. B. iii. p. 321 (1901).

This species is widely distributed in the wooded hills throughout the island. We obtained a large series.

Ad. J. Ribola, Nov. 1, 1902. Iris hazel; bill black; legs and feet greenish.

In the immature bird the crown is brownish grey, and the under parts from the throat downwards are obscure greenish olive, with little or no trace of yellow except on the centre of the abdomen.

40. STELGIDILLAS POENSIS.

Stelgidillas poensis Alexander, Bull. B. O. C. xiii. p. 35 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 111.

Stelgidillas gracilirostris Salvad. (nec Strickl.); Salvad. Orn. Golfo d. Guinea, iii. p. 111.

Adult male. Similar to S. gracilirostris (Strickl.), but having the upper parts yellowish olive; entire crown einereous; chin and throat whitish, remainder of under parts pale ashy grey, becoming pale creamy buff on the abdomen and under tail-coverts.

Total length 7.2 inches, culmen 0.8, wing 3.2, tail 3.0, tarsus 0.8. Iris bright hazel; bill, legs, and feet dark brown. (*Type*. Sipopo, Nov. 8, 1902.)

Adult female. Total length 7 inches, culmen 0.6, wing 3.1, tail 3.2, tarsus 0.7. (Type. Near Ribola, Nov. 2, 1902.)

The notes of this species are a series of clear whistles.

The type of S. gracilirostris (Strickl.), which is in the British Museum, is said to have come from Fernando Po, but I find that it does not agree with my birds from that island, but does agree with the ordinary continental form, which has the crown of the head uniform with the back,

the upper parts being dark olive-greenish in colour, and the under parts dark ashy grey washed with olive.

I have not a doubt that the locality of S. gracilirostris has been erroneously marked, and that it was obtained by Fraser on the mainland and not on Fernando Po.

Ad. J. Near Ribola, Nov. 2, 1902.

41. Criniger calurus (Cass.).

Criniger calurus Shelley, B. Afr. i. no. 873 (1896); Sharpe, Hand-l. B. iii. p. 316 (1901).

a. Ad. d. Ribola, Nov. 2, 1902.

b. Ad. d. Ribola, Nov. 2, 1902.

Iris claret-red; bill bluish horn-coloured; legs and feet slaty blue. Breeding.

c. Ad. d. Sipopo, Nov. 6, 1902.

d. Ad. Lakha, Nov. 8, 1902.

Found in the woods in the vicinity of the coast. Not common.

42. Criniger tricolor (Cass.).

Criniger tricolor Sharpe, Hand-l. B. iii. p. 317 (1901).

Pyrrhurus tricolor Shelley, B. Afr. i. no. 892 (1896).

Ad. &. Sipopo, Nov. 4, 1902. Total length (measured in flesh) 7 inches, wing 3.2, culmen 0.8, tail 3.1, tarsus 0.7. Upper mandible dark brown, lower greenish horn-coloured; legs and feet slate-coloured. Breeding.

Ad. Q. Bilelipi, Nov. 25, 1902. Total length (measured in flesh) 5.9 inches, wing 2.8, culmen 0.71, tail 2.7, tarsus 0.7.

Common in the woods at the foot of the hills, frequenting the tops of leafy trees, which it examines quietly and diligently for insects. The note is "hi-hee," deliberately repeated several times.

43. Phyliostrophus poensis.

Phyllostrophus poensis Alexander, Bull. B. O. C. xiii. p. 35 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 111.

Adult. Similar to P. placidus (Criniger placidus Shelley, B. Afr. i. p. 63), but with the entire crown brown slightly

washed with olive; lores and region round eye cinereous; remainder of upper parts dark greenish olive; chin and throat whitish; fore-neck and flanks washed with olive-brown; breast and middle of abdomen whitish, slightly washed with yellow: iris hazel; bill brownish black, underneath whitish horn-coloured; legs and feet bluish-slate-coloured.

Adult 3. Total length 7.4 inches, culmen 0.9, wing 3.4, tail 3.1, tarsus 0.9. (*Type*. Bakaki, 4000 ft., Nov. 18, 1902.)

Adult \mathfrak{P} . Total length 7.2 inches, culmen 0.8, wing 2.9, tail 2.95, tarsus 0.82. (*Type*. Bakaki, 4000 ft., Nov. 20, 1902.)

Ad. J. Bakaki, Nov. 11, 1902.

Ad. 9. Mount St. Isabel, Nov. 26, 1902.

This species is confined to high altitudes, differing in this respect from *Stelyidillas poensis*, which was found to inhabit the lowlands. It breeds in November.

44. Turdinus fulvescens (Cass.).

Trichastoma rufipennis Sharpe, Ann. & Mag. Nat. Hist. (4) x. p. 451 (1872).

Turdinus fulvescens Sharpe, Cat. B. Brit. Mus. vii. p. 545 (1883); Shelley, B. Afr. i. no. 913 (1896).

Turdinus albipectus Reichen. J. f. O. 1887, p. 307 (Congo).

Turdinus bocagei Salvad. Boll. Mus. Torino, xviii. no. 442 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 111.

a. Imm. \(\phi\). Basupu, Oct. 30, 1902. Iris hazel; upper mandible black, lower yellowish horn-coloured, brighter at base; legs and feet slaty flesh-coloured.

b. Imm. d; ad. d. Sipopo, Nov. 3, 1902.

c. Imm. d. Ribola, Nov. 3, 1902.

d. Imm. d. Sipopo, Nov. 7, 1902.

e. Ad. J. Lakha, Nov. 8, 1902.

f. Ad. ♀. Bakaki, Nov. 9, 1902.

g. Imm. J. Bakaki, Nov. 19, 1902.

h. Ad. d. Bakaki, Nov. 22, 1902.

Locally distributed in wooded localities, where the ground is inclined to be swampy. It keeps much to the undergrowth, travelling with a gliding flight from one twig to another. The note uttered is a noisy "tizz."

Ad. &. (Lakha, Nov. 8, 1902.)

Head dark brown and slightly ashy, back and mantle reddish brown washed with olive, becoming more rufous on the rump and ferruginous on the upper tail-coverts. Forehead, lores, ear-coverts, and sides of head ashy grey. Wingcoverts like the back; quills and secondaries fulvous brown, margined with the same colour as the back. Tail-feathers dark rufous brown edged with rufous. Throat and middle of abdomen white; chest, sides, and flanks strongly washed with dark olive-brown; under tail-coverts more fulvous brown; thighs brownish grey. Iris brown; upper mandible black, lower dark greenish horn-coloured; legs and feet slate-coloured. Total length 5.5 inches, culmen 0.75, wing 3, tail 2.1, tarsus 1.0.

The following specimens of *T. fulvescens*, with which our birds are identical, are in the Brit. Mus.:—

- a. Ad. d. Rio Benito, French Congo (G. L. Bates).
- b. Ad. \circ . Efulen, Cameroon (G. L. Bates).
- c. Ad. \circ . Efulen, Cameroon (G. L. Bates).
- d. Imm. Rio Camma, Gaboon (Du Chaillu). Co-type.
- e. Imm. West Africa (Du Chaillu). Co-type.
- f. Nestling. Rio Camma, Gaboon (Du Chaillu). Type of T. rufipennis.

It will be seen that Cassin's original description of *T. fulvescens* was taken from the immature bird.

Our immature specimens differ from the adults in being smaller and in having the upper parts more rufescent brown, which becomes almost clear ferruginous on the rump and upper tail-coverts; wing-coverts and quills edged with rufous; under tail-coverts reddish-chestnut. In several of the more mature specimens this rufous coloration is giving way to the more olive-brown of the adult.

In the nestling stage the rufous coloration of the upper parts, especially of the wings and upper tail-coverts, is much more marked, while the under parts are dirty white washed with dull fulvous on the breast and flanks.

This species can always be distinguished from its congeners by the more sharply defined pattern in the plumage of the under parts and the greater prodominance of white in the coloration.

Range. Fernando Po, Cameroon, Gaboon, and French Congo.

45. Turdinus Batesi Sharpe.

Turdinus batesi Sharpe, Ibis, 1902, p. 94, pl. iv. fig. 2.

Ad. J. Bakaki, 4000 ft., Nov. 19, 1902. Breeding.

Total length (measured in flesh) 6·1 inches, culmen 7·5, wing 3, tail 2·2, tarsus 1·1.

Iris brown, eyelids bluish slate-coloured; upper mandible brownish black, lower slaty horn-coloured; legs and feet pinkish flesh-coloured.

Rare. Frequents thick bush and is confined to the hills. The note of the male is a clear whistle, which becomes very persistent towards dusk.

Range. Cameroon and Fernando Po.

The type of this species was obtained by Mr. Bates at Efulen, Cameroon, June 3, 1901.

46. STIPHRORNIS GABONENSIS (Sharpe).

Stiphrornis gabonensis Bocage, Jorn. Lisb. (2) iv. p. 9 (1895: Fernando Po); Shelley, B. Afr. i. no. 923 (1896); Bocage, Jorn. Lisb. (2) vii. p. 35 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 110.

a. Ad. 3. Ribola, Nov. 2, 1902. Total length (measured in flesh) 5 inches, culmen 0.6, wing 2.8, tail 1.7, tarsus 0.9. Iris black; bill black; legs and feet slaty flesh-coloured.

b. Ad. d. Ribola, Nov. 2, 1902.

c. Ad. d. Sipopo, Nov. 3, 1902.

d. Ad. 3. Sipopo, Nov. 4, 1902.

e. Imm. J. Sipopo, Nov. 6, 1902.

f. Imm. Bakaki, Nov. 9, 1902.

g. Ad. β . Badasou, Nov. 11, 1902.

Immature. Differs from the adult in its pale yellow bill,

the whitish flesh-colour of the legs and feet, the tawny buff spots at the end of the wing-coverts; the chin and throat, which are white, with narrow crescentic slaty-grey edges to the feathers; fore-neck pale orange, with narrow fringes of slaty grey to some of the feathers.

This species is locally distributed and frequents the marshy forest-ground at the foot of the hill-ranges. It is a tame and confiding bird and in habits recalls our Robin. Native name "Di weba." It keeps much to the undergrowth, where it flits with a low flight from one bush to another.

47. HYLIA PRASINA (Cass.).

Hylia prasina Shelley, B. Afr. i. no. 924 (1896).

Hylia poensis Alexander, Bull. B. O. C. xiii. p. 36 (1903); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 110.

I find, on further examination of a larger series, now at my disposal, that the Fernando Po *Hylia* is not separable from *H. prasina*, the characters assigned to the former not remaining constant.

Ad. J. Ribola, Oct. 30, 1902. Iris hazel; bill black; legs and feet greenish olive.

In the immature bird the bill, legs, and feet are yellow. The female is larger than the male.

This species is widely distributed in the woods at the foot of the hill-ranges. The breeding-season commences in November. A good series was obtained.

Poliolais, gen. nov.

This new genus is next to Camaroptera, but the distinctive characters are the white outer tail-feathers and the uniform rufous brown crown.

48. Poliolais helenoræ.

Poliolais helenoræ Alexander, Bull. B. O. C. xiii. p. 36 (1903); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 109.

Adult. Forehead, crown, and back of neck rufous brown, fading into pale chestnut on the sides of the forehead and head; remainder of upper parts dusky olive-brown, paler on

the upper tail-coverts; tail white, with the exception of the central pair of feathers which are like the back, next pair with a broad white shaft-stripe only; under wing-coverts and inner margins of quills white; chin and throat white shading into whitish ash on the breast, rather darker on the sides of the fore-chest; thighs, vent, and under tail-coverts tawny brown: iris black; bill dark brown; legs and feet brown.

Total length 3.6 inches, culmen 0.6, wing 1.9, tail 1.2, tarsus 0.9. (*Type*. Bakaki, 4000 feet, Nov. 20, 1902.)

Rare. A pair obtained in the thickets of the forest. Named after my late sister Miss Helenor Alexander.

49. CAMAROPTERA GRANTI.

Camaroptera granti Alexander, Bull. B. O. C. xiii. p. 36 (1903: Fernando Po); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 109.

Adult male. General colour above dull olive-green; quills and secondaries dusky brown, externally edged with golden olive-green; tail-feathers like the back; lores, sides of face, and under parts cinereous, becoming paler on the chin, throat, and abdomen; breast slightly washed with olive; thighs tawny yellow; under wing-coverts white, washed with yellow; lining to quills white: iris hazel; eyelid dirty yellow; upper mandible brown, lower whitish horn-coloured; legs pale brown, feet lighter.

Total length 4.2 inches, culmen 0.6, wing 2.2, tail 1.2, tarsus 0.9. (*Type*. Badasou, Nov. 11, 1902.)

The female is smaller than the male and lighter on the under parts, with no olive wash on the fore-neck.

Total length 3.7 inches, culmen 0.5, wing 1.9, tail 1, tarsus 0.8. (*Type*. Bakaki, Nov. 19, 1902.)

The nearest ally of this species is C. concolor (Temm.).

We found this bird frequenting the thickets at the base of the hills and generally in the vicinity of villages. Skulking in habits, it is more often heard than seen, uttering its plaintive notes—a "wheet" "wheet" several times repeated.

Named after Mr. Ogilvic-Grant.

50. Camaroptera superciliaris (Fraser).

Sylvicola superciliaris Fraser, P. Z. S. 1843, p. 3 (Clarence, Fernando Po: type, Brit. Mus.); id. Ann. & Mag. Nat. Hist. xii. p. 440 (1843).

Prinia icterica Strickl. P. Z. S. 1844, p. 100 (Fernando Po); id. Ann. & Mag. Nat. Hist. xv. p. 126 (1845); Allen & Thomson, Narr. Exped. Niger, ii. App. p. 495 (1848: Fernando Po).

Chloropeta icterica Hartl. J. f. O. 1854, p. 17 (Fernando Po); id. Orn. W.-Afr. p. 60 (1857).

Camaroptera superciliaris Sharpe, Cat. B. M. vii. p. 171 (1883: Fernando Po); Shelley, B. Afr. i. no. 963 (1896); Salvad. Orn. Golfo di Guinea, iii. p. 109.

Drymoica icterica Gray, Hand-l. B. i. p. 203. no. 2867 (1869: Fernando Po).

- a. Ad. 3. Sipopo, Nov. 11, 1902. Total length 3.78 inches, culmen 0.62, wing 1.9, tail 1.2, tarsus 0.8. Iris bright hazel; exposed part of throat bluish lead-coloured; legs and feet reddish flesh-coloured. Breeding.
 - b. Ad. J. Sipopo, Nov. 7, 1902.
 - c. Ad. d. Bakaki, Nov. 15, 1902.
 - d. Ad. J. Bilelipi, Nov. 24, 1902.
- e. Ad. 9. Bilelipi, Nov. 24, 1902. Total length 3.6 inches, culmen 0.6, wing 1.8, tail 1.2, tarsus 0.7.

This species is locally distributed and is confined to the more open bush-grown and cultivated country outside the forest.

The note of the male is a rich metallic "chee-up." It is ventriloquial and can be heard at a considerable distance.

51. CAMAROPTERA FLAVIGULARIS Reichen.

Camaroptera flavigularis Shelley, B. Afr. i. no. 965 (1896).

- a. Ad. 3. Basakato, Nov. 12, 1902. Total length 4 inches, culmen 0.6, wing 2.05, tail 1.5, tarsus 0.75. Bill black; iris hazel; exposed portion on throat bright bluish lead-coloured; legs blackish brown; feet brown.
- b. Ad. Q. Basakato, Nov. 12, 1902. Total length 3.45 inches, culmen 0.6, wing 1.9, tail 1.3, tarsus 0.65. Coloration as in male.

The type of this species was discovered by Dr. Zenker at Jaunde in Cameroon (August 1894).

52. CRYPTOLOPHA HERBERTI.

Cryptolopha herberti Alexander, Bull. B. O. C. xiii. p. 35 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 103.

Adult. Entire crown black; base of forehead and broad eyebrow extending to back of nape rufous; spot in front of eye and stripe through eye black; remainder of upper parts bright olive-green; quills, secondaries, and tail-feathers blackish brown, externally edged on their outer webs with bright olive-green; chin, throat, and sides of face rufous; breast white, washed with rufous; remainder of under parts silky white; flanks grey; thighs greyish white; edge of wing pale sulphur-yellow; under wing-coverts and lining to quills white: iris black; upper mandible black, lower yellowish horn-coloured; legs and feet brown.

This remarkable little bird has no near ally. It comes nearest to C. læta Sharpe, from Ruwenzori (see Bull. B. O. C. xiii. p. 9), but besides its distinctive characters it is considerably smaller than the East-African species.

Adult C. herberti.

Total length 3.5 inches, culmen 0.5, wing 1.9, tail 1.1, tarsus 0.7. (*Type*. Near Bakaki, 6000 feet, Nov. 20, 1902.)

Adult C. læta.

Total length 4 inches, culmen 0.5, wing 2.3, tail 1.55, tarsus 0.9. (*Type*. Brit. Mus.)

I found this Cryptolopha rare. The two specimens obtained were shot from the top of a high tree in the vicinity of our first camping-ground on the way up to the Peak, at an altitude of 6000 feet.

Named after Mr. Herbert Alexander.

53. Apalis Rufigularis (Fraser).

Drymoica rufogularis Fraser, P. Z. S. 1843, p. 17 (Clarence, Fernando Po: type, Brit. Mus.); id. Ann. & Mag. Nat.

Hist. xii. p. 479 (1843: Fernando Po); Allen & Thomson, Narr. Exped. Niger, ii. p. 491 (1848: Fernando Po); Fraser, Zool. Typ. pl. xlii. fig. 1 (1849); Hartl. J. f. O. 1854, p. 15 (Fernando Po); id. Orn. W.-Afr. p. 58 (1857: Fernando Po): Gray, Hand-l. B. i. p. 201. no. 2836 (1869: Fernando Po).

Prinia olivacea Strickl. P. Z. S. 1844, p. 99 (Fernando Po: type, Brit. Mus.); id. Ann. & Mag. Nat. Hist. xv. p. 126 (1845: Fernando Po); Allen & Thomson, Narr. Exped. Niger, ii. p. 494 (1848: Fernando Po).

Chloropeta olivacea Hartl. J. f. O. 1854, p. 17 (Fernando Po); id. Orn. W.-Afr. p. 60 (1857: Fernando Po).

Drymoica olivacea Gray, Hand-l. B. i. p. 201. no. 2837 (1869: Fernando Po).

Euprinodes rufigularis Salvad. Orn. Golfo d. Guinea, iii. p. 108.

Euprinodes olivaceus Salvad. Orn. Golfo d. Guinea, iii. p. 108.

Apalis rufigularis Shelley, B. Afr. i. no. 989 (1896). Apalis olivacea Shelley, B. Afr. i. no. 994 (1896).

Adult male. General colour above slaty grey, washed with olive-green on the back and rump; wing-coverts brown, edged with olive-green; quills and secondaries brown, with olive edges to the latter; tail-feathers dusky brown, the two central uniform, the next two white with broad brown edges along the webs, the two outer entirely white; ear-coverts slaty grey; cheeks, throat, and breast pale rufous; remainder of under surface dull white, washed with ashy on the flanks; thighs slaty grey; under wing-coverts white: bill black; iris orange; legs slaty brown; feet warm flesh-coloured. (Bakaki, Nov. 15, 1903.)

Total length 4.2 inches (measured in flesh), culmen 0.5, wing 1.9, tail 1.7, tarsus 0.6.

It is very interesting to have re-discovered this species, previously known only from Fraser's type in the British Museum. That specimen is, however, in poor condition and appears to have been at one time in spirits. I have therefore thought it advisable to give a full description of our specimen,



J.G. Keutemans del. et lith.

I APALIS LOPEZI.

2.CYANOMITRA URSULÆ.

Mintern Bros.imp.

which is in fresh plumage. I have also carefully re-examined and compared it with *Prinia olivacea* Strickl. from Fernando Po, the type of which is in the British Museum. I have no hesitation in making *P. olivacea* synonymous with *A. rufigularis*, the former being based on the immature stage of the latter.

We found this elegant little Warbler near Bakaki, frequenting low bush. It is scarce, only one specimen having been obtained.

54. APALIS LOPESI. (Plate IX. fig. 1.)

Apalis lopezi Alexander, Bull. B. O. C. xiii. p. 35 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo di Guinea, iii. p. 108.

Ad. & &. Bakaki, Nov. 19, 1902.

Adult. Upper parts brownish grey; wing-coverts, quills, and secondaries brown; two central tail-feathers brown, the next two with white centres, the three outer white; under parts dark brownish grey, becoming paler (almost whitish) on the middle of the abdomen; thighs brown; edge of wing white; under tail-coverts white: iris bright hazel; bill dark brown; legs and feet brown.

Total length 4 inches, culmen 0.6, wing 2.1, tail 1.4, tarsus 0.9. (*Type*. Bakaki, 4000 feet, Nov. 19, 1902.)

Not common. Found in thick bush. Breeds in November. This Apalis is allied to A. sharpii Shelley, from the Gold Coast, but differs chiefly in the grey throat and generally paler under parts, and in the three outer tail-feathers being pure white. It is also larger.

Adult A. sharpii. Type. Gold Coast.

Total length 4.2 inches, culmen 0.45, wing 1.8, tail 1.8, tarsus 0.7.

Adult A. lopezi. Type. Fernando Po.

Total length 4 inches, culmen 0.6, wing 2.1, tail 1.4, tarsus 0.9.

Named after the author's collector, Mr. Lopes, of St. Nicolas, Cape Verde Islands.

55. Apalis sclateri.

Euprinodes scluteri Alexander, Bull. B. O. C. xiii. p. 36 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 109.

Adult male. Upper parts cinereous; entire crown and sides of head washed with brown; wing-coverts like the back; quills and secondaries brown; three central tail-feathers brown, remainder white; entire under parts cream-colour, becoming paler on the abdomen; under wing-coverts, edge of wing, and lining to quills white; thighs brown washed with cinereous: bill black; legs and feet reddish flesh-coloured, (Mount St. Isabel, Nov. 26, 1902.)

Total length 5·1 inches, culmen 0·6, wing 2·2, tail 2·4, tarsus 0·85.

The female is smaller than the male and is slightly paler on the under parts.

Total length 4.5 inches, culmen 0.5, wing 1.9, tail 1.9, tarsus 0.65. (Moka, Nov. 13, 1903.)

This Warbler is allied to A. cinerea Sharpe, from Mount Elgon, East Africa, but differs chiefly in having the entire under parts deeper in colour with little or no white except on the abdomen.

We first obtained this species on our way up the mountain at an elevation of over 5000 feet. The flight is airy as the bird flits from one tree to another. It is locally distributed on the high ground throughout the island. My collector obtained a good series of five specimens near the Moka Lake. In November the bird was breeding, all our specimens being in considerably worn plumage.

Named after Dr. P. L. Sclater, F.R.S.

Urolais, gen. nov.

This remarkable genus is allied to the genera *Apalis* and *Chlorodyta*, but is easily distinguishable from them by its very long graduated tail of ten feathers.

A specimen of *Urolais mariæ* with the tail shortened would closely resemble in structure and general style of coloration *Chlorodyta flavida* (Strickl.).



J.G. Keulemans del. et lith.

56. UROLAIS MARIÆ. (Plate VIII.)

Urolais mariæ Alexander, Bull. B. O. C. xiii. p. 35 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 108.

Adult male. Upper parts yellowish green; quills and secondaries dark brown, edged with yellowish green; lores and ring round eye yellow; sides of face like the back; under parts pale buff, becoming lighter on the chin, throat, and abdomen; thighs yellowish green; tail-feathers greyish brown, broadly tipped with white, the two central rectrices, which are the longest, are white at their ends to a distance equal to one-third of their length; edge of wing pale yellow; under wing-coverts and lining to quills white: iris hazel; bill black, at tip whitish horn-coloured; legs and feet yellowish flesh-coloured. Total length 7.8 inches, culmen 0.6, wing 2.1, tail 5.0, tarsus 0.9. (Type. Mt. St. Isabel, Nov. 17, 1902. Breeding.)

We obtained two specimens of this rare species on our way up the mountain. They were shot in company with several Sun-birds (Cinnyris preussi). This elegant little Tree-Warbler seems to revel in the misty surroundings of the mountain, travelling with dancing flight from one tall tree to another.

Named after Mrs. Boyd Alexander.

57. CRYPTILLAS LOPESI.

Phlexis lopezi Alexander, Bull. B. O. C. xiii. p. 48 (1903). Adult. Upper parts chocolate-brown; quills and tail slightly darker, the rufous shade being more confined to the edges of the feathers; lores and ear-coverts slightly more dusky than the forchead and crown, from which they are separated by a well-defined rufous-buff eyebrow; chin, throat, and centre of breast rufous buff, shading into chocolate-brown on the sides of the neck and body, thighs, and under tail-coverts; lining of wing dusky brown, with the coverts rufous buff. Total length 5.5 inches, culmen 0.5, wing 2.2, tail 2.5, tarsus 0.9. (Type. Moka, Dec. 15, 1902.)

The sexes are alike in plumage and measurements.

The nearest ally of this species is *Phloxis rufescens* Sharpe (Bull. B. O. C. xiii. p. 9), from Mt. Ruwenzori, East Africa.

This species is confined to the southern portion of Fernando Po. My collector first met with it in the Moka valley, where he obtained a good series. It was very shy and difficult to approach, constantly dipping down to the bottom of the grass after a short flight, and uttering in its hidden retreat a series of ventriloquial whistles. In December breeding had commenced.

Named after the author's collector, Mr. Lopes.

58. CALAMOCICHLA POENSIS.

Calamocichla poensis Alexander, Bull. B. O. C. xiii. p. 37 (1903); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 108.

Adult male. Similar to C. brevipennis, but larger; primarics, secondaries, and wing-coverts margined on their outer webs with rufous; upper tail-coverts rufous; tail-feathers blackish brown, tipped with white, the central narrowly margined with rufous: iris bright hazel; upper mandible brown, lower yellowish horn-coloured; legs and feet bluish slate-coloured. Total length 6.8 inches, culmen 0.8, wing 3.0, tail 2.75, tarsus 1.15. (Type. Bilelipi, Nov. 24, 1902. Breeding.)

Adult male, C. brevipennis, St. Nicholas, Cape Verde Islands, April 1897 (Alexander):—Total length 6 inches, culmen 0.6, wing 2.5, tail 2.5, tarsus 1.2.

The genus Calamocichla is closely allied to Lusciniola, and represents a small but well-defined group of African Warblers. Typical examples of L. gracilirostris differ from C. brevipennis, C. newtoni, and the present species in having the first primary proportionately longer, and more than half the length of the second, the upper parts greenish olive, and the under parts dull white, with none of the yellowish-buff coloration which is always present in the African Calamocichlæ.

The Fernando Po Reed-Warbler is very locally distributed on the island. We only met with it on one occasion, when it was found in the depths of thick fish-cane surrounding the native huts of Bilelipi, a little "Boobie" village, where we pitched our tent prior to ascending the mountain. We constantly heard this bird about the camp, especially after a fall of rain—its beautiful trill of notes, like those of *C. brevipennis* (Alexander, Ibis, 1898, p. 83), never failing to arrest our attention. The alarm-note is a harsh "churr" several times repeated.

59. Phylloscopus trochilus (Linn.).

Ad. J. Sipopo, Nov. 5, 1902.

Ad. 9. Moka, Dec. 14, 1902.

60. Alethe Castanea (Cass.).

Alethe castanea Shelley, B. Afr. i. no. 1153 (1896); Bocage, Jorn. Lisb. (2) vii. p. 34 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 107.

a. Ad. 3. Ribola, Nov. 2, 1902.

b. Ad. 9. Ribola, Nov. 2, 1902.

c. Ad. J. Ribola, Nov. 2, 1902.

d. Ad. ♂. Ribola, Nov. 1, 1902. Iris hazel; bill black; legs and feet bluish flesh-coloured.

e. Ad. J. Sipopo, Nov. 3, 1902.

f. Imm. J. Sipopo, Nov. 4, 1902.

g. Imm. ♀. Sipopo, Nov. 4, 1902.

Description of the young. Upper parts dull black, with pale oval chestnut centres to each feather, becoming narrower on the crown and nape; under parts chestnut-rufous, with feathers of the fore-neck and chest fringed with black; under wing-coverts grey.

We found this bird widely distributed everywhere in the undergrowth, flying low from bush to bush, always in a very laboured manner. The note is a running "churr," which is weak for the size of the bird. Whenever, after rain, a swarm of driver-ants covered the ground and the branches of the trees, these birds mustered in dozens, stealing with low flight surreptitiously up to their prey, to disappear again the next minute into the thicket.

61. Alethe moorl.

Alethe moori Alexander, Bull. B. O. C. xiii, p. 37 (1903);

Bocage, Jorn. Lisb. (2) vii. p. 40 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 107.

Adult male. Anterior portion of crown cinereous; lores blackish; narrow eyebrow and remainder of upper parts chestnut; quills dusky brown, outer webs chestnut; tailfeathers brownish chestnut, inclining to chestnut on the outer webs; chin and throat white, washed with cinereous; remainder of under parts leaden grey; middle of abdomen white; under wing-coverts leaden grey: iris reddish hazel; upper mandible black, lower slaty horn-coloured; legs and feet bluish slate-coloured. Total length 7·1 inches, culmen 0·8, wing 3·2, tail 2·85, tarsus 1·15.

Rare. Our single specimen was obtained at an altitude of 6000 feet. This species is shy and keeps much to the ground in the forest.

Named after Sir Ralph Moor, K.C.B., High Commissioner of Southern Nigeria.

62. Alethe Poliocephala (Bp.).

Trichophorus poliocephalus Bp. Consp. Av. i. p. 262 (1850); Hartl. J. f. O. 1854, p. 25; id. Orn. W.-Afr. p. 85 (1857: Fernando Po).

Criniger poliocephalus Finsch, J. f. O. 1867, p. 26 (Fernando Po).

Alethe castanonota Sharpe, Cat. B. Brit. Mus. vii. p. 59, pl. ii. (1883).

Alethe poliocephala Büttik. Not. Leyd. Mus. vii. p. 177 (1885); Shelley, B. Afr. i. no. 1156 (1896); Salvad. Orn. Golfo d. Guinea, iii. p. 107.

Callene hypoleuca Reichen. J. f. O. 1892, p. 221, Taf. ii. f. 3 (juv.: Kamerun).

Alethe hypoleuca Shelley, B. Afr. i. p. 83 (1896).

Alethe alexandri Sharpe, Bull. B. O. C. xii. p. 4 (1901).

Ad. ♂♀. Bakaki, 4000 feet, Nov. 17, 1902.

The male differs slightly from the female in having the crown, lores, car-coverts, and sides of face brownish black, and the breast tinged with pale buff.

Iris hazel; bill black; legs and feet whitish flesh-coloured.

This bird is scarce; it haunts the running brooks in the vicinity of the hills. When perched, it has a peculiar way of rapidly opening and closing its wings, after the manner of a Wheatear.

This Alethe is the Criniger poliocephalus of Temminck, originally obtained from the Gold Coast and Fernando Po, the description agreeing with our present specimens from the latter locality.

Alethe alexandri from Cameroon was separated from A. castanonota on account of the sides of the face being black, but this character is not constant.

Our male specimen, which is not quite adult (lower mandible not entirely black), has the sides of the head and crown almost reddish brown, and in this respect agrees with specimens of A. castanonota from Fantee, in the British Museum. In fully-adult birds this reddish coloration in the plumage would disappear, as in our adult female specimen. The figure of A. castanonota in the 'Catalogue of Birds' was evidently taken from an immature bird, a reddish phase in young birds being a character of this genus.

63. Neocossyphus poensis (Strickl.).

Cossypha poensis Strickl. P. Z. S. 1844, p. 100 (Clarence, Fernando Po: type, Brit. Mus.); id. Ann. & Mag. Nat. Hist. xv. p. 126 (1845); Allen & Thomson, Narr. Exped. Niger, ii. App. p. 496 (1848: Fernando Po); Fraser, Zool. Typ. pl. 37 (1849); Hartl. Orn. W.-Afr. p. 77 (1857: Fernando Po); Bocage, Jorn. Lisb. (2) vii. p. 34 (1903: Fernando Po).

Neocossyphus poensis Shelley, B. Afr. i. no. 1179 (1896); Salvad. Orn. Golfo d. Guinea, iii. p. 107.

Ad. 9. Ribola, Oct. 31, 1902.

Total length (measured in flesh) 8·1 inches, culmen 0·76, wing 4·3, tail 3·56, tarsus 1. Iris brown; bill brown; legs and feet flesh-coloured.

Uncommon; frequenting furtively the open spots where cocoa is grown on the borders of the forest.

This is a shy bird, never remaining in view for very long,

alighting quickly on the ground, the next moment to disappear into the cover of some thick-leaved tree.

Range. From the Gold Coast to Cameroon; Gaboon and Fernando Po.

64. CALLENE POENSIS.

Callene poensis Alexander, Bull. B. O. C. xiii. p. 37 (1903); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 106.

- a. Ad. J. Near Bakaki, Nov. 19, 1902.
- b. Ad. & (type). Bilelipi, Nov. 25, 1902.
- c. Ad. J. Mt. St. Isabel, Nov. 25, 1902.
- d. Ad. ♀. Moka, Dec. 16, 1902.

Adult. Upper parts olive-brown, inclining to blackish brown on the crown; upper tail-coverts chestnut; central tail-feathers reddish brown, remainder chestnut, the two outer margined with brown; quills, secondaries, and wing-coverts edged with olive-brown on their outer webs; sides of face and remainder of under parts orange-red; centre of abdomen white; thighs olive-brown; under wing-coverts orange-rufous: iris brown; bill black; legs and feet slaty flesh-coloured. Total length 5.2 inches, culmen 0.65, wing 2.9, tail 2.0, tarsus 1.05.

The nearest ally of this species is *C. isabellæ* from Cameroon. This *Callene* affects the high ground, where it is locally distributed.

65. CALLENE ROBERTI.

Callene roberti Alexander, Bull. B. O. C. xiii. p. 37 (1903); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 106.

a. Ad. ♂♀ (types), ♂♂♂. Bakaki, 4000 feet, Nov. 18, 1902.

Adult male. General colour above olive-brown; quills and secondaries blackish brown, with olive-brown edges to their outer webs; upper tail-coverts and tail-feathers chestnut, three central feathers black; lores olive-brown, washed with red; a distinct white streak from the base of the bill to the front part of the eye; chin, throat, and breast orange-rufous,

becoming deeper on the latter part; remainder of under parts white; thighs blackish brown; under wing-coverts white; lining to quills pale fulvous: iris black; bill black; legs and feet blackish brown. Length 5 inches, culmen 0.6, wing 2.6, tail 1.75, tarsus 0.85.

The sexes are alike in plumage. Nearest ally, C. cyornithopsis Sharpe (Bull. B. O. C. xii. p. 4) from Cameroon.

Rare. Frequents high ground. It is a silent and shy bird, keeping much to the ground and low undergrowth.

Named after Captain Robert Alexander.

66. Pratincola axillaris Shelley.

Pratincola axillaris Shelley, Birds Afr. i. no. 1191 (1896). Seven adult and two immature males. Moka, December 1902.

Confined to the southern portion of the island—in the Moka Valley, which is overgrown with long grass and low scattered bushes.

67. Turdus poensis.

Turdus poensis Alexander, Bull. B. O. C. xiii. p. 37 (1903); Bocage, Jorn. Lisb. (2) vii. p. 40 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 106.

- a. Ad. 3. Bakaki, 4000 feet, Nov. 19, 1902.
- b. Ad. ♂ ♀ (types); ad. ♂. Bakaki, Nov. 20, 1902.
- c. Ad. ♂ ♂ ♂ ♂ . Pico Joaquin, Dec. 10-12, 1902.
- d. Ad. ♂. Moka, Dec. 13, 1902.

Adult. General colour of upper parts olive-brown; primaries brown, edged on their outer webs with olive-brown; outer webs of secondaries of the same colour as the back, with indistinct blackish bars across the webs; tail-feathers brown, washed with olive on their outer webs; lores blackish; chin and throat white, with broad blackish-brown streaks to the feathers; breast and flanks brown; feathers of the lower breast with whitish erescentic terminal bands; abdomen and under tail-coverts white; thighs brown; axillaries and under wing-coverts orange-rufous; lining to quills pale fawn-coloured; iris hazel; bill yellow; legs and feet brown.

Total length 8.2 inches, culmen 0.8, wing 4.2, tail 2.9, tarsus 1.2.

The nearest ally of this species appears to be *Turdus xan-thorhynchus* Salvad., from Prince's Island.

This Thrush is by no means common, being confined to the eastern and southern portions of the island, where it frequents the wooded highlands.

68. LIOPTILUS CLAUDI.

Lioptilus claudei Alexander, Bull. B.O.C. xiii. p. 34 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 103.

- a. Ad. & (type). Bakaki, Nov. 17, 1902.
- b. Ad. & Q. Bakaki, Nov. 17, 1902.
- c. Ad. ♀ (type); ad. ♂. Mount St. Isabel, Nov. 26, 1902.
- d. Ad. ♂♂♂♀. Moka, Dec. 8–15, 1902.

Adult. Entire head, back, and scapulars cinercous, slightly darker on the crown; rump and upper tail-coverts rufous brown; quills, secondaries, and tail-feathers brown, edged on their outer webs with rufous brown; chin and throat cinercous, with slight white striations to the feathers; breast cinercous; centre of abdomen white; flanks washed with rufous brown; under tail-coverts cinercous; feathers of thighs rufous brown; under wing-coverts and lining to quills pale tawny: iris black; upper mandible brown, lower slaty horn-coloured; legs and feet slaty flesh-coloured. (Type. St. Isabel, Nov. 17, 1902.)

Total length 5.2 inches, culmen 0.55, wing 2.6, tail 2.25, tarsus 0.9.

The sexes are similar in plumage and measurements.

This Lioptilus frequents high altitudes, and was the last species observed near the summit of St. Isabel. Though the birds were often obscured from view by the heavy mountain mist, their pretty flute-like songs could be heard from the tops of the trees. We generally observed them in small parties of four or five.

The nearest ally of this species is L. abyssinicus, from East Africa.

Named after my brother Mr. Claud Alexander, 1st Scots Guards.

69. Muscicapa grisola Linn.

Muscicapa grisola Shelley, B. Afr. i. no. 1308 (1896).

I obtained a specimen of this species on November 8, 1902, at Sipopo.

70. Alseonax obscura Sjost.

Alseonax obscura Sharpe, Hand-l. B. iii. p. 207 (1901).

Ad. 3. Bakaki, Nov. 17, 1902. Upper mandible brown, lower one pale horn-brown at tip; legs and feet brown.

Frequents the tops of tall trees on the hills. It is more plentiful in the southern portion of the island. At Moka my collector obtained two male and five female specimens in December.

The range of this species includes Cameroon and Fernando Po.

71. Cassinia fraseri (Strickl.).

Muscipeta fraseri Strickl. P. Z. S. 1844, p. 101 (Fernando Po: type, Brit. Mus.); id. Ann. & Mag. Nat. Hist. xv. p. 128 (1845); Allen & Thomson, Narr. Exped. Niger, ii. App. p. 491 (1848: Fernando Po); Hartl. Orn. W.-Afr. p. 95 (1857).

Butalis fraseri Bp. Consp. Av. i. p. 318 (1850: Fernando Po).

Smithornis fraseri Gray, Hand-l. B. i. p. 324. no. 4869 (1869: Fernando Po).

Cassinia fraseri Bocage, Jorn. Lisb. (2) iv. p. 8 (1895: Fernando Po); Shelley, B. Afr. i. no. 1332 (1896); Bocage, Jorn. Lisb. (2) vii. p. 34 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. 103.

a. Ad. \(\rho\). Sipopo, Nov. \(3\), 1902. do Ad. \(\delta\). Sipopo, Nov. \(8\), 1902. do beetles.

c. Ad. ♂. Badasou, Nov. 11, '02.)

d. Ad. ♀. Badasou, Nov. 11, 1902.

e. Ad. 9. Bakaki, Nov. 16, 1902.

Uncommon, frequenting undergrowth of the hills.

These examples agree well with the type from Fernando Po in the British Museum. On the other hand, specimens from Gaboon and the Congo differ in having the general coloration much more reddish brown, especially on the upper parts, becoming a deep rufous on the rump and upper tail-coverts. This is the mainland form of *C. fraseri*, and is referable to *C. rubricauda* of Hartlaub, which has hitherto been made synonymous with *C. fraseri*.

The following specimens of C. rubricauda are in the

British Museum :-

J. Landana (Petit).

3. 1882. Landana (Petit).

Ad. Gaboon.

♀. Landana (Petit).

♂. Congo (Bouvier).

Ad. Gaboon.

72. SMITHORNIS SHARPII. (Plate VII.)

Smithornis sharpei Alexander, Bull. B. O. C. xiii. p. 34 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 103.

a. Ad. ?. Bakaki, Nov. 15, 1902.

b. Ad. d. Bakaki, Nov. 19, 1902.

c. Ad. ♂ (type); ad. ♀. Bakaki, Nov. 20, 1902.

d. Ad. \(\gamma\) (type). Mount St. Isabel, Nov. 25, 1902.

Adult. Entire head cinereous, with faint shaft-stripes; lores and frontal band bright rufous; ear-coverts cinereous; remainder of upper parts brownish rufous, becoming brighter on the upper tail-coverts; feathers of the back with white bases and with subterminal black bands; tail-feathers rufous brown, inclining to rufous on the outer edges; quills blackish brown; sides of neck and fore-neck bright rufous; chin and throat white, with blackish streaks to the side-feathers; breast and remainder of under parts pale creamy white, with blackish streaks to the feathers of the breast and flanks; under wing-coverts fawn-coloured: iris brown; upper mandible black, lower whitish horn-coloured; legs and feet greenish.

Total length (measured in flesh) 6 inches, culmen 07,

wing 3.1, tail 1.8, tarsus 0.8.

The male is a little larger than the female, and is generally brighter on the sides of the neck and breast. A near ally,



Smithornis zenkeri, has since been discovered by Dr. Zenker in Cameroon. It differs from Smithornis sharpii in having a brownish-olive shade on the upper parts instead of a clear olive, and the general coloration of the under parts duller, especially the rufous on the neck and fore-neck, which is less intense. There is a specimen of S. zenkeri in the British Museum, obtained by Mr. Bates at Efulen, Cameroon. This specimen is not fully adult, since there are pale tawny spots on the wing-coverts. It is, therefore, probable that the Cameroon species will prove to be the immature form of S. sharpii. We found our new Smithornis only at high altitudes in thickly-wooded localities, where it was locally distributed in pairs. It was breeding in November.

Retiring in nature, it seeks the misty dells and quiet thickets of the mountain-side, where it remains inert for many hours; and then, when daylight begins to fade, wakes up and utters from time to time a peculiar note—a grinding and discordant "churr"—to its mate, long after other birds have fallen asleep.

73. DIAPHOROPHYIA CHLOROPHRYS.

Diaphorophyia chlorophrys Alexander, Bull. B. O. C. xiii. p. 34 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 103.

a. Ad. &. Bakaki, Nov. 17, 1902.

b. Ad. &. Near Bakaki, 4000 ft., Nov. 18, 1902.

c. Ad. ♂ (type); ad. ♀. Bakaki, Nov. 19, 1902.

d. Ad. ♀ (type); ad. ♂. Bakaki, Nov. 20, 1902.

e. Ad. 3. St. Isabel, Nov. 26, 1902.

Adult male. Glossy greenish black, brighter on the tail-feathers; breast and remainder of under parts rich creamy yellow; under wing-coverts white; thighs black: iris bluish black; eye-wattle delicate grass-green; legs and feet slaty blue. Total length (measured in flesh) 4.2 inches, culmen 0.55, wing 2.1, tail 0.9, tarsus 0.8.

Adult female. Duller and with less gloss on the upper parts. In the breeding-season, which is in November, the plumage of this bird becomes richer and brighter, especially in the

male. We found it in the vicinity of the Peak, and it was also observed by my collector in the southern portion of the island. It is by no means common, and frequents the undergrowth, flitting from shrub to shrub, the male from time to time emitting a weak croaking note.

74. Diaphorophyia castanea (Fraser).

Platystira castanea Fraser, P. Z. S. 1842, p. 141 (Clarence, Fernando Po: type, Brit. Mus.); id. Ann. & Mag. Nat. Hist. xii. p. 131 (1843); id. Zool. Typ. pl. xxxiv. fig. 2, ♀ (1849).

Platystira leucopygialis Fraser, P. Z. S. 1842, p. 141 (Clarence, Fernando Po); id. Ann. & Mag. Nat. Hist. xii. p. 131 (1843); Allen & Thomson, Narr. Exped. Niger, ii. App. p. 499 (1848: Fernando Po); Fraser, Zool. Typ. pl. xxxiv. fig. 1, & (1849); Hartl. Orn. W.-Afr. p. 95 (1857: Fernando Po).

Diaphorophyia leucopygialis Bocage, Jorn. Lisb. (2) vii. p. 33 (Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 101.

Diaphorophyia castanea Shelley, B. Afr. i. no. 1352 (1896); Sharpe, Hand-l. B. iii. p. 245 (1901).

We obtained a good series of this Flycatcher, which is common in the low country. The males were generally observed together, frequenting the woods and making their presence known by their ventriloquial notes, which resemble the croaking of a bull-frog.

Adult. Iris reddish brown; eye-wattle dirty claret-red; legs and feet pale lilac.

75. Batis poensis.

Batis poensis Alexander, Bull. B. O. C. xiii. p. 34 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 102.

Adult male. Similar to B. minulla, but differs in having the entire crown black and the pectoral band much narrower; iris lemon-coloured. Total length 3.6 inches, culmen 0.4, wing 2.2, tail 1.4, tarsus 0.5. (Type. Bakaki, Nov. 14, 1902.)

Adult female. Similar to the female of B. minulla, but differs in having the red pectoral band much narrower. Total length 3.5 inches, culmen 0.4, wing 2.0, tail 1.3, tarsus 0.5. (Type. Bakaki, Nov. 14, 1902.)

Not common. Seen on the tops of high trees.

76. TROCHOCERCUS ALBIVENTRIS Sjöstedt.

Trochocercus albiventris Sharpe, Hand-l. B. iii. p. 251 (1901).

a. Ad. J. Bakaki, Nov. 17, 1902. Iris and bill black; legs and feet brown.

b. Ad. 9. Bakaki, Nov. 17, 1902.

c. Ad. ♀. Bakaki, Nov. 19, 1902.

d. Ad. J. Bakaki, Nov. 20, 1902.

e. Ad. 3. Mount St. Isabel, Nov. 26, 1902.

f. Ad. 3. Mount St. Isabel, Nov. 26, 1902.

g. Ad. J. Pico Joaquin, Dec. 11, 1902.

These specimens agree well with an example of *T. albi-* rentris in the British Museum obtained by Sir II. Johnston from Cameroon. This uncommon Flycatcher is confined to the high hills on the north and south sides of the island. It frequents the leafy tops of high trees.

77. TERPSIPHONE TRICOLOR (Fraser).

Muscipeta (Tchitrea Less.) tricolor Fraser, P. Z. S. 1843, p. 4 (Clarence, Fernando Po).

Muscipeta tricolor Allen & Thomson, Narr. Exped. Niger, ii. App. p. 492 (1848: Fernando Po).

Tchitrea tricolor Hartl. Orn. W.-Afr. p. 90 (1857: Fernando Po).

Terpsiphone tricolor, Bocage, Jorn. Lisb. (2) iv. p. 8 (1895: Fernando Po); Shelley, B. Afr. i. no. 1392 (1896); Sharpe, Hand-l. B. iii. p. 264 (1901); Bocage, Jorn. Lisb. (2) vii. p. 33 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 102.

a. Ad. 9. Basupu, Oct. 29, 1902.

b. Ad. 3. Basupu, Oct. 30, 1902.

c. Ad. J. Basupu, Oct. 30, 1902.

d. Ad. J. Basupu, Oct. 30, 1902.

e. Ad. 3. Ribola, Nov. 2, 1902.

f. Ad. d. Bilelipi, Nov. 24, 1902.

Bill dark bluish slate-coloured; legs and feet bluish lead-coloured. Breeding.

Widely distributed at the base of the hills.

In the sunny glades of the forest the bright plumage of this Flycatcher used frequently to arrest the eye as it flitted airily from one branch to another, the male every now and again uttering a soft running "tiz."

78. PSALIDOPROCNE FULIGINOSA Shelley.

Psalidoprocne fuliginosa Shelley, B. Afr. i. no. 1446 (1896); Sharpe, Hand-l. B. iii. p. 202 (1901).

Psalidoprocne poensis Alexander, Bull. B. O. C. xiii. p. 34 (1903: Bakaki, Fernando Po); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 101.

On a more careful examination, I find that the characters of *P. poensis* are not constant. A fully adult example brought home by my collector subsequently to the publication of my description is identical with the type of *P. fuliginosa* in the British Museum. The general paler brown of the throat, breast, and under wing-coverts, which served to separate my former specimens from *P. fuliginosa*, is a sign of immaturity.

Adult male. Iris brown; legs and feet pinkish flesh-coloured. Basakato, Nov. 12, 1903.

This species is locally distributed on the island. Small parties frequent the open spots in the forest, where they make use of the dead branches of trees as resting-places.

79. Cypselus poensis.

Cypselus poensis Alexauder, Bull. B. O. C. xiii. p. 33 (1903); Bocage, Jorn. Lisb. (2) vii. p. 38 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 116.

Adult male. Similar to C. unicolor Jard., but differs in being considerably smaller. The upper parts are paler brown, with little or no greenish gloss on the feathers; chin, throat, and fore-neck pale whitish. Total length 6.2 inches, culmen 0.25, wing 5.2, tail 2.4, tarsus 0.4. (Type. Sipopo, Nov. 6, 1902.)

At Sipopo, on November 6, towards evening, a flock of these Swifts suddenly appeared in the vicinity of our house, which was situated on high ground, about two miles from the sea. We observed these birds on several other occasions.

There is a specimen of *Tachornis gracilis* in the British Museum labelled "Fernando Po," but the locality may be doubted (see p. 400).

80. Heterotrogon francisci.

Heterotrogon francisci Alexander, Bull. B. O. C. xiii. p. 33 (1903); Bocage, Jorn. Lisb. (2) vii. p. 38 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 116.

Adult female. Allied to H. vittatum, but differs in being considerably smaller, and in having the white bars on the greater wing-coverts and secondaries wider and more distinct: iris reddish brown; upper mandible black, lower orange-yellow; soft parts orange-yellow; legs and feet yellowish flesh-coloured. Total length (measured in flesh) 9.4 inches, culmen 0.6, wing 4.4, tail 4.9, tarsus 0.6.

Type. Bakaki, 4000 feet, Nov. 18, 1902. Breeding.

This is a rare bird, and is one of the best discoveries made by my collector. Its scarcity can be judged by the fact that the Boobie hunters had never seen it before. It is very shy and keeps much to the undergrowth. My collector obtained only one specimen out of a pair which he saw.

Named after Colonel Boyd Francis Alexander.

81. Eurystomus gularis Vieill.

Eurystomus gularis Bocage, Jorn. Lisb. (2) iv. p. 7 (1895: Santa Isabel, Fernando Po); Shelley, B. Afr. no. 1511 (1896); Sharpe, Hand-l. B. ii. p. 47 (1900); Bocage, Jorn. Lisb. (2) vii. p. 31 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 117.

Observed on one occasion only.

82. Merops Marionæ.

Merops marionis Alexander, Bull. B. O. C. xiii. p. 33 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Gol fo d. Guinea, iii. p. 117.

Adult male. Similar to M. northcotti Sharpe, but differs in having the black band round the throat wider. It is also larger.

Adult (M. marionæ). Bakaki, 4000 ft., Nov. 17, 1902. Total length 8.4 inches, culmen 1.4, wing 3.5, tail 3.3, tarsus 0.4. Iris red; legs and feet dull purplish black.

Adult (M. northcotti). British Museum. Gold Coast. Length 7.2 inches, culmen 1.2, wing 3.3, tail 3.5.

We first met with this Bee-eater at Basakato, near Bakaki. Our second specimen was obtained at an elevation of 4000 ft. Found in pairs.

Named after Miss Marion Alexander.

83. Ispidina leucogastra (Fraser).

Haleyon leucogaster Fraser, P. Z. S. 1843, p. 4 (Clarence, Fernando Po: type, Brit. Mus.); Allen & Thomson, Narr. Exped. Niger, ii. p. 503 (1848: Fernando Po).

Alcedo leucogaster Fraser, Zool. Typ. pl. xxxii. (1849); Bp. Consp. Av. i. p. 159 (1850: Fernando Po).

Ispidina leucogastra Bocage, Jorn. Lisb. (2) iv. p. 7 (1895: Fernando Po); Shelley, B. Afr. i. no. 1610 (1896); Sharpe, Hand-l. B. ii. p. 54 (1900); Reichen. Vög. Afrikas, ii. p. 288 (1902: Fernando Po); Bocage, Jorn. Lisb. (2) vii. p. 31 (1903: Fernando Po).

Ispidina leucogaster Salvad, Orn. Golfo d. Guinca, iii. p. 116. Occasionally observed along the mountain-streams.

84. HALCYON LOPESI.

Haleyon lopezi Alexander, Bull. B. O. C. xiii. p. 33 (1903); Bocage, Jorn. Lisb. (2) vii. p. 38 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 117.

Adult female. Upper parts and sides of head dark chestnut; quills black; secondaries black, with a subquadrate speculum of bluish green; lower back, rump, and upper tail-coverts light bluish green; tail-feathers bluish green, edged on their inner webs and broadly tipped with black; entire under parts white; under wing-coverts white: iris brown; eyelids coral-red; bill dark coral-red; legs and feet coral. Total length (measured in flesh) 8.6 inches, culmen

1.7, wing 4.0, tail 2.2, tarsus 0.5. (*Type*. Sipopo, Nov. 6, 1902.)

This Kingfisher differs from its near ally *H. badius* in its larger dimensions, and in the nearly square shape of the speculum on the wings.

It inhabits woods close to the sea.

85. Turacus meriani (Rüpp.).

Turacus meriani Shelley, B. Afr. i. no. 1650 (1896).

a. Ad. ♀. Bakaki, Nov. 14, 1902. Iris brown; eyelids coral-red; bill yellow, base of upper and lower mandibles coral-red; legs and feet black.

b. Ad. 9. Bakaki, Nov. 19, 1902.

c. Ad. ♀. Moka Lake, Dec. 12, 1902.

Common in the wooded hills, and found in pairs which resort to tall thick-leaved trees. The note is a guttural grunt, like that of a bull-frog; in the male it is louder and more prolonged. In the early morning, long before the mists had cleared off the hills, we used to hear these peculiar cries, sometimes almost in unison like the "gobbling" of many Turkeys.

86. Corythæola cristata (Vieill.).

Corythæola cristata Schal. J. f. O. 1886, p. 55 (Fernando Po); Shelley, B. Afr. i. no. 1660 (1896); Bocage, Jorn. Lisb. (2) vii. p. 32 (1903; Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 118.

Zizorhis gigantea Allen & Thomson, Narr. Exped. Niger, ii. App. p. 504 (1848: Fernando Po).

Turacus giganteus Hartl. J. f. O. 1854, p. 125 (Fernando Po); id. Orn. W.-Afr. p. 159 (1857).

a. Ad. d. Bilelipi, Nov. 25, 1902.

Iris bright hazel; bill yellow, tip of bill black, fore-tip banded with red; legs and feet dull blackish brown.

Found amongst the hills in small parties.

On the way up the mountain our "Boobie" hunter killed one of these birds. Immediately others came round and proved very bold, uttering the whole time hoarse croaks, which can be heard at a long distance and sound resonant in the hill-valleys.

By the white inhabitants this bird is generally known as "pheasant." Native name "kee-so."

The natives are fond of adorning their hats with the pinion- and tail-feathers of this bird.

87. CEUTHMOCHARES ÆNEUS (Vieill.).

Ceuthmochares ænens (Vieill.); Bocage, Jorn. Lisb. (2) iv. p. 7 (1895: Santa Isabel, Fernando Po); Shelley, B. Afr. i. no. 1680 (1896); Sharpe, Hand-l. B. ii. p. 172 (1900); Bocage, Jorn. Lisb. (2) vii. p. 32 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 118.

Zanclostomus flavirostris Fraser (nec Swains.), P. Z. S. 1843, p. 52 (Fernando Po); Allen & Thomson, Narr. Exped. Niger, ii. p. 221 (1841).

a. Ad. 2. Basupu, Oct. 30, 1902. Bill yellow; iris claret-red; soft parts blue. Iris of young bird brown; upper mandible brown, lower pale horn-coloured.

b. Ad. J. Basupu, Oct. 31, 1902.

c. Ad. J. Bakaki, Nov. 11, 1902.

A common bird, haunting the thick trees, through which it works its way with wonderful agility. The young were abroad in November. Native name "Bu-e saw-e-saw."

88. Chrysococcyx smaragdineus (Swains.).

Chrysococcyx smaraydineus Bocage, Jorn. Lisb. (2) iv. p. 11 (1895: Fernando Po, observed); Shelley, B. Afr. i. no. 1709 (1896); Bocage, Jorn. Lisb. (2) vii. p. 32 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 118.

Metallococcyx smaragdineus Sharpe, Hand-l. B. ii. p. 161 (1900).

Ad. J. Sipopo, Nov. 9, 1902.

89. Chrysococcyx cupreus (Bodd.).

Chrysococcyx cupreus Shelley, B. Afr. i. no. 1712 (1896); Sharpe, Hand-l. B. ii. p. 161 (1900); Bocage, Jorn. Lisb. (2) vii. p. 32 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 118.

Chalcites auratus Allen & Thomson, Narr. Exped. Niger, ii. p. 221 (1848).

Chrysococcyx auratus Hartl, Orn. W.-Afr. p. 190 (1857: Fernando Po).

Ad. 9. Moka, Dec. 14, 1902.

90. Indicator poensis.

Indicator poensis Alexander, Bull. B. O. C. xiii. p. 33 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 119.

Adult male. Similar to I. exilis, but smaller. Crown and nape ashy grey; white patch near nostril very distinct; base of forehead dusky black; band below cheeks and ear-coverts dusky; under parts pale ashy grey, fading into whitish on the chin; thigh-coverts with dark shaft-stripes: iris hazel; bill black, horn-coloured at base of lower mandible; legs and feet greenish. Length 4·3 inches, culmen 0·35, wing 2·5, tail 1·45, tarsus 0·45. (Type. Bakaki, Nov. 9, 1902.)

This new species comes close to *Indicator willcocksi* Alexander, from the Gold Coast.

The key for these small West-African Honey-guides reads as follows:—

- a. Crown ashy brown, slightly washed with yellow and mottled with darker centres to the feathers.
 - a'. A dusky band below cheeks and ear-coverts.

a". Under parts ashy I. exilis.

- b. Crown golden olive, slightly striped with blackish centres to the feathers; upper parts almost uniform.
 - b'. No dusky band below cheeks and ear-coverts.
 - b". Under parts ashy olive, fading into creamy white on the lower breast and abdomen ..., I. willcocksi.
- c. Smaller; wing 2.5; crown ashy grey.
 - c'. Dusky blackish band below cheeks and earcoverts.
 - c". Under parts pale ashy grey, fading into whitish on the chin I. poensis.

91. Barbatula leucolæma J. & E. Verr.

Barbatula leucolæma Shelley B. Afr. i. no. 1773 (1896); Sharpe, Hand-l. B. ii. p. 182 (1900).

a. Ad. ?. Ribola, Nov. 2, 1902.

b. Ad. ♀. Bakaki, Nov. 18, 1902. Legs and feet dull black.

c. Ad. ♂♂♂♂♂♀. Moka, Dec. 7-14, 1902.

Well distributed in the wooded hills. More plentiful in the southern portion of the island.

92. BARBATULA SUBSULPHUREA (Fraser).

Bucco subsulphureus Fraser, P. Z. S. 1843, p. 3 (Fernando Po); Allen & Thomson, Narr. Exped. Niger, ii. App. p. 504 (1848: Fernando Po); Fraser, Zool. Typ. pl. 52 (1849).

Barbatula subsulphurea Hartl. J. f. O. 1854, p. 195 (Fernando Po); Verr. P. Z. S. 1859, p. 392 (Fernando Po); Shelley, B. Afr. i. no. 1774 (1896); Sharpe, Hand-l. B. ii. p. 182 (1900); Bocage, Jorn. Lisb. (2) vii. p. 31 (1903: Fernando Po); Salvad. Orn. Golfo di Guinea, iii. p. 119.

- a. Ad. J. Basupu, Oct. 30, 1902.
- b. Ad. ♀. Basupu, Oct. 30, 1902.
- c. Ad. 3. Ribola, Oct. 31, 1902.
- d. Ad. d. Bakaki, Nov. 9, 1902.
- e. Ad. ♂. Bakaki, Nov. 9, 1902.

Common in the low country.

93. BARBATULA SCOLOPACEA (Temm.).

Barbatula scolopacea Bocage, Jorn. Lisb. (2) iv. p. 7 (1895: Fernando Po); Shelley, B. Afr. i. no. 1776 (1896); Sharpe, Hand-l. B. ii. p. 182 (1900); Bocage, Jorn. Lisb. (2) vii. p. 31 (1903: Fernando Po).

Bucco stellatus Jard. & Fraser, Contr. Orn. 1851, p. 155 (Clarence, Fernando Po).

Xylobucco scolopacea Hartl. Orn. W.-Afr. p. 174 (1857: Fernando Po); Verr. P. Z. S. 1859, p. 397 (Fernando Po).

Xylobucco scolopaceus Salvad. Orn. Golfo d. Guinea, iii. p. 119.

Abundant, frequenting the lowlands in small parties on the tops of high trees.

Ad. Q. Basupu, Oct. 29, 1902. Iris lemon-yellow; bill dark bluish slate-coloured; legs and feet slate-coloured. Note, a loud "click."

94. Dendromus poensis.

Campothera poensis Alexander, Bull. B. O. C. xiii. p. 33 (1903); Bocage, Jorn. Lisb. (2) vii. p. 39 (1903); Salvad. Orn. Golfo di Guinea, iii. p. 119.

- a. Ad. & (type). Besoso, Nov. 13, 1902.
- b. Ad. ♀ (type). Bakaki, Nov. 14, 1902.
- c. Ad. 9. Bilelipi, Nov. 24, 1902.
- d. Ad. J. Bilelipi, Nov. 25, 1902

Adult male. Similar to D. nivosus, but the forehead, crown, and occiput light brown; chin, ear-coverts, and sides of face white striped with brownish black; under parts with scarcely any shade of olive: iris bright hazel; bill brownish lead-coloured; feet greenish. Length 6·3 inches (measured in flesh), culmen 0·75, wing 3·3, tail 1·65, tarsus 0·65.

A shy bird and difficult to obtain, frequenting the wooded hills. The food of this Woodpecker consists principally of black ants and their larvæ.

95. Vinago calva (Temm. & Knip).

Treron calva Bocage, Jorn. Lisb. (2) iv. p. 11 (1895: Fernando Po).

Vinago calva Shelley, B. Africa, i. no. 1851 (1896); Sharpe, Hand-l. B. i. p. 52 (1899); Salvad, Orn. Golfo d. Guinea, iii. p. 120.

- Ad. &. Sipopo, Nov. 3, 1902.
- Ad. 9. Basupu, Oct. 30, 1902.

Iris blue; bill bluish horn-coloured, soft parts crimson; legs and feet orange-yellow.

A common Pigeon in the vicinity of cultivation. The typical V. calva is found in Loango and Angola. Our two specimens from Fernando Po agree well with the Angola specimens in the British Museum and with those from Cameroon and Gaboon. On the other hand, specimens from Sierra Leone and the Gold Coast differ from the typical V. calva in having the grey neek and collar brighter and more distinct, and the under parts of a pale greenish olive instead of yellowish greenish olive. This form is the Vinago calva sharpii of Reichenow (Orn. Monatsb. 1902, p. 45).

Ranges:

Vinago calva.

West Africa, from Cameroon across to Fernando Po, and Prince's Island, ranging as far south as Angola.

Vinago sharpii.

West Africa, from Sierra Leone to River Niger.

96. Turtur semitorquatus (Rüpp.).

Turtur semitorquatus (Rüpp.); Shelley, B. Afr. i. no. 1878 (1896).

Streptopelia semitorquata Sharpe, Hand-l. B. i. p. 78 (1899).

a. Ad. d. Bilelipi, Nov. 24, 1902.

b. Ad. J. Moka, Dec. 16, 1902.

Common in the neighbourhood of the coast.

97. Haplopelia simplex (Hartl.).

Haplopelia simplex, Shelley, B. Afr. i. no. 1873 (1896).

Haplopelia poensis Alex. Bull. B. O. C. xiii. p. 33 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 121.

We obtained two female specimens of this species. One of these agrees well with two typical female specimens of *H. simplex* from San Thomé.

Immature female. Forehead and front of crown vinous white; occiput and hind-neck with a coppery purplish gloss; remainder of upper parts brown, with a purplish gloss on the feathers of the wings and back; sides of neck vinous rufous; chin white; breast and under parts vinous rufous, with a strong coppery purplish gloss on the fore-neck in certain lights; under tail-coverts cinereous: bill black; cere lead-coloured; legs and feet claret-coloured. Total length (measured in flesh) 10 inches, culmen 0.85, wing 5.9, tail 3.2, tarsus 1.15. (Bakaki, 4000 feet, Nov. 19, 1902.)

The gizzard contained a large number of gnats.

This is the type of my *H. poensis*, but since writing the description of that form I have come to the conclusion that it is the immature bird of *H. simplex*, which apparently passes through a distinct rusty reddish phase of plumage during the first year.

The fact that these two female specimens were obtained in the same locality within a day of each other, and most probably from the same flock, makes it difficult to suppose that they are of different species.

This Ground-Pigeon is very shy and keeps much to the thick undergrowth in small flocks.

98. Tympanistria bicolor Reichenb.

Peristera tympanistria Fraser, P. Z. S. p. 53 (1843: Fernando Po; breeding); Hartl. Orn. W.-Afr. p. 197 (1857).

Tympanistria fraseri Bp. Consp. Av. ii. p. 67 (1854: Fernando Po).

Tympanistria tympanistria Shelley, B. Afr. i. no. 1893 (1896); Sharpe, Hand-l. B. i. p. 83 (1899); Bocage, Jorn. Lisb. (2) vii. p. 37 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 121.

- a. Imm. 3. Sipopo, Nov. 6, 1902.
- b. Ad. d. Basakato, Nov. 12, 1902.
- c. Imm. d. Bakaki, Nov. 15, 1902.

Locally distributed in pairs in the woods where there are open clearings, and in the cocoa-plantations.

This is a shy species, darting away with a rapid and straight flight at the approach of footsteps.

99. Psittacus erithacus Linn.

Psittacus erithacus Bocage, Jorn. Lisb. (2) iv. p. 10 (1895: Fernando Po); Shelley, B. Afr. i. no. 1915 (1896); Reichen. Vög. Afrikas, ii. p. 2 (1902: Fernando Po); Bocage, Jorn. Lisb. (2) vii. p. 38 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 119.

Constantly observed passing high overhead in large flocks. It is a migrant to the island.

100. Milvus ægyptius (Gm.).

Milvus ægyptius Bocage, Jorn. Lisb. (2) iv. p. 10 (1895; Fernando Po); Shelley, B. Afr. i. no. 2011 (1896); Sharpe, Hand-l. B. i. p. 268 (1899); Reichen. Vög. Afrikas, i. p. 609 (1901; Fernando Po); Bocage, Jorn. Lisb. (2) vii. p. 38 (1903; Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 120.

Occasionally observed about the harbours.

101. ASTUR LOPESI Alexander.

Astur lopezi Alexander, Bull. B. O. C. xiii. p. 49 (1903); Salvad. Orn. Golfo d. Guinea, iii. p. 120.

Adult male. Above blackish slate-coloured; crown, nape, and sides of neck slaty blue, paler on the last; chin and throat white, the lower part washed with pale vinous chestnut; remainder of under parts bright vinous chestnut, with remains of whitish cross-bars, especially on the breast; centre of abdomen and under tail-coverts white; tail-feathers black tipped with white, and with three irregular white spots on their inner webs; under tail-coverts white, barred with vinous chestnut: iris black; cere yellow; legs and feet orange-yellow; claws black. Total length 13 inches, culmen 0.9, wing 7.3, tail 6.2, tarsus 2.3. (Type. Moka, Dec. 11, 1902.)

This species is allied to A. toussenelli (Verr.), but differs in the coloration of the under parts and thighs and in being smaller.

Range. Cameroon and Fernando Po.

102. Pseudogyps africanus (Salvad.).

Pseudogyps africanus Shelley, B. Afr. i. no. 2094 (1896); Sharpe, Hand-l. B. i. p. 242 (1899).

Ad. 2. Near Sipopo, Nov. 8, 1902.

This bird is locally distributed along the coast-line. It is much prized for food by the natives.

103. ARDEA GULARIS Bosc.

Ardea gularis Bose; Bocage, Jorn. Lisb. (2) iv. p. 11 (1895: Fernando Po); Shelley, B. Afr. i. no. 2120 (1896); Bocage, Jorn. Lisb. (2) vii. p. 38 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 122.

Lepterodius gularis Sharpe, Hand-l. B. i. p. 196 (1899).

An adult female was obtained on an islet called Leven, off Banterbari, where a colony of these birds breeds.

+104. ÆGIALITIS DUBIA (Scop.).

Ægialitis dubia Shelley, B. Afr. i. no. 2471 (1896); Sharpe, Hand-l. B. i. p. 154 (1899).

One specimen obtained near Sipopo, Nov. 8, 1902.

105. Tringoides hypoleucus (Linn.).

Totanus hypoleucus Shelley, B. Afr. i. no. 2494 (1896).

Tringoides hypoleucus Sharpe, Hand-l. B. i. p. 161 (1899);

Bocage, Jorn. Lisb. (2) vii. p. 37 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 121.

Frequently observed along the creeks of the shore-line.

- Part III.—LIST OF BIRDS RECORDED AS OCCURRING IN FER-NANDO PO BY PREVIOUS AUTHORS, SPECIMENS OF WHICH WERE NOT OBTAINED ON THE PRESENT OCCASION.
 - 1. Zosterops brunnea Salvad.

Speirops brunnea Salvad. Boll. Mus. Torino, xviii. no. 442 (1903: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 106.

2. Lamprocolius splendidus (Vieill.).

Lamprotornis chrysonotus Swains.; Fraser, P. Z. S. 1843, p. 52 (Fernando Po).

Lamprocolius splendidus Salvad. Orn. Golfo d. Guinea, iii. p. 115.

3. Lamprocolius purpureus Müll.

Lamprocolius auratus Hartl. Orn. W.-Afr. p. 117 (1857: Fernando Po).

Lamprocolius purpureus Salvad. Orn. Golfo d. Guinea, iii. p. 115.

4. Onycognathus hartlaubi Gray.

Onycognathus hartlaubi Sharpe, Cat. B. Brit. Mus. xiii. p. 166 (1890); Salvad. Orn. Golfo d. Guinea, iii. p. 115.

5. Laniarius sulphureipectus (Less.).

Laniarius chrysogaster Hartl. Orn. W.-Afr. p. 107. (Fraser.)

Laniarius sulphureipectus Salvad. Orn. Golfo d. Guinea, iii. p. 104.

6. Andropadus Gracilirostris Strickl.

Andropadus gracilirostris Allen & Thomson, Narr. Exped. Niger, ii. p. 497 (1848). (Fraser.) 7. XENOCICHLA ALBIGULARIS Sharpe.

Xenocichla albigularis Sharpe, Cat. B. vi. p. 103, pl. vii. fig. 1. Xenocichla tricolor Salvad. (nec Cass.) Orn. Golfo d. Guinea, iii. p. 110.

Professor Bocage's description (Jorn, Lisb. (2) vii. p. 35) of a specimen obtained by Mr. Newton in Fernando Po answers well to the type of X. albigularis in the British Museum.

8. EREMOMELA BADICEPS (Fraser).

Sylvia badiceps Fraser, P. Z. S. 1842, p. 144 (Clarence, Fernando Po).

Eremomela badiceps Salvad. Orn. Golfo d. Guinea, iii. p. 109.

9. Fraseria ocreata Strickl.

Tephrodornis ocreatus Strickl. P. Z. S. 1844, p. 102 (Fernando Po: type, Brit. Mus.).

Fraseria ochreata Salvad. Orn. Golfo d. Guinea, iii. p. 103.

10. TERPSIPHONE ATROCHALYBEA (Thomson).

Tchitrea atrochalybeia Allen & Thomson, Narr. Exped. Niger, ii. p. 494 (1848: Fernando Po).

Terpsiphone atrochalybea Reichen. J. f. O. 1875, p. 24 (Cameroon); Salvad. Orn. Golfo d. Guinea, iii. p. 102.

The type, stated to have been obtained by Thomson in Fernando Po, and now in the British Museum, agrees well with specimens from San Thomé. It is curious that this remarkable-looking bird should have escaped our notice, but, as it occurs in Cameroon, it is quite possible that the locality assigned to it by Thomson may be correct.

11. Tachornis gracilis (Sharpe).

Cypselus ambrosiacus Hartl. Orn. W.-Afr. p. 24 (1857: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 116.

12. Chætura sabinii Gray.

Chatura sabinei Hartl. Orn. W.-Afr. p. 25 (1857: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 116.

Acanthylis bicolor Strickl. P. Z. S. 1844, p. 99 (Fernando Po).

13. CERATOGYMNA ATRATA (Temm.).

Buceros atratus Hartl. Orn. W.-Afr. p. 162 (Fernando Po). Buceros poensis Fraser, P. Z. S. 1853, p. 14 (Fernando Po). Ceratogymna atrata Salvad. Orn. Golfo d. Guinea, iii. p. 117.

14. CERYLE RUDIS (Linn.).

Ispida bicincta Fraser, P. Z. S. 1843, p. 51 (Fernando Po). Ceryle rudis Hartl. Orn. W.-Afr. p. 37 (1857: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 116.

15. HALCYON CYANOLEUCUS (Vieill.).

Haleyon cyanoleuca Bocage, Jorn. Lisb. (2) iv. p. 7 (1895: Banks of Shark River, Fernando Po, Newton).

16. HALCYON DRYAS Hartl.

Halcyon cinereifrons part. Hartl. Beitr. Orn. W.-Afr. p. 18, no. 53 (1850: Fernando Po); id. J. f. O. 1854, p. 2 (Fernando Po, Fraser); id. Orn. W.-Afr. p. 32 (Fernando Po, Fraser, 1857).

Haleyon dryas Sharpe, Cat. B. xvii. p. 248 (Fernando Po, Fraser); Shelley, B. Afr. i. no. 1627 (1896); Salvad. Orn. Golfo d. Guinea, iii. p. 117.

17. Turacus Buffoni (Vieill.).

Corythaix buffoni Hartl. Orn. W.-Afr. p. 156 (1857: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 117.

18. Cuculus solitarius (Steph.).

Cuculus rubiculus Swains.; Fraser, P. Z. S. 1843, p. 52 (Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 118.

19. Agapornis pullaria (Linn.).

Agapornis pullaria Hartl. Orn. W.-Afr. p. 168 (1857: Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 119.

20. STRIX FLAMMEA Linn.

Strix poensis Fraser, P. Z. S. 1842, p. 189 (Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 120.

21. Bubo poensis Fraser.

Bubo poensis Fraser, P. Z. S. 1853, p. 13 (Fernando Po); Salvad. Orn. Golfo d. Guinea, iii. p. 120.

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Bubo fasciolatus Hartl. Orn. W.-Afr. p. 18 (Fernando Po, Fraser).

22. Gypohierax angolensis (Gm.).

Gypohierax angolensis Hartl. Orn. W.-Afr. p. 1 (Fernaudo Po, Fraser); Salvad. Orn. Golfo d. Guinea, iii. p. 120.

23. Vanellus albiceps.

Vanellus albiceps Gould, P. Z. S. 1834, p. 45; Allen & Thomson, Narr. Exped. Niger, ii. p. 508 (1848: River Quorra, West Africa); Hartl. Orn. W.-Afr. p. 214 (Fernando Po, Fraser).

Sarciophorus albiceps Fraser, Zool. Typ. pl. lxiv. (1849: Fernando Po).

Xiphidiopterus albiceps Salvad. Orn. Golfo d. Guinea, iii. p. 121.

According to Messrs. Allen and Thomson, the type of this species was obtained by Capt. Allen from the Quorra, West Africa, during his expedition up that river, and not from Fernando Po. Gould, in his original description of the species also supports this statement.

Part IV .- ORNITHOLOGICAL BIBLIOGRAPHY OF FERNANDO Po.

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